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MODEL RAILWAY

MAGAZINE

REIDS FLAT (part 2)



3D Printing – an overview
Building a VR 'One-off'
Prototype Wagon Loads
Reviews • Mailbag • AMRM News



Issue 315 Vol. 27 No.6

ISSN 0045-009X



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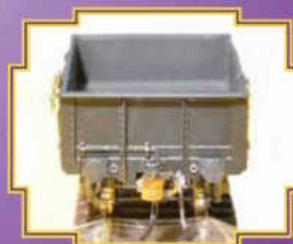
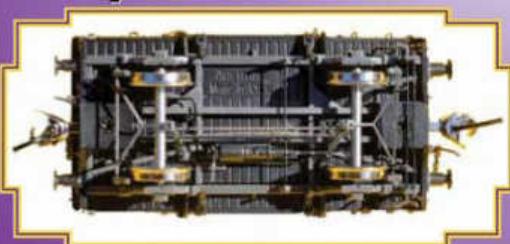
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Comment

By Bob Gallagher

The Ageing Faces

Over the month of July 2015, AMRM office staff and a few helpers moved the office and store; the fifth office move since 1986 and at least the eighth move of the store, which holds quite a few tonnes of books and magazines. Yes, this represents over fifty years of publication. And yet in the early 1970s there was serious doubt as to the reality of the *Australasian Model Railroad Magazine* continuing. While the volunteer staffers never really thought of their work ceasing, the education and family demands saw their available time to work on the magazine diminish issue by issue. Sure, in the early 1970s, magazine preparation was fairly basic and would only take up three weeks of the two-month cycle, but the three weeks had to be continuous. If not, 3am finishes were needed and were for a while the norm.

In the mid-1970s a new crew of volunteers was found and generally these continued to support the magazine up to, and after, a full-time manager was appointed a decade later. But in the mid-2000s the scene changed as many of the volunteers, after decades of helping, sought release from their time-consuming duties. While a production manager change was initiated and a few new volunteers found, the bulk of the behind the scenes workers remained the same. In some instances, many of these volunteers could not step down, for there is a legal need for a governing management board and some exhibitions demanded an AMRM presence.

AMRM and its owners, the Southern Cross Model Railway Association, face a similar problem to most organisations that are run by volunteers; there seem to be very few new faces putting their hands up these days. When we look around the clubs and associations, we find many ageing faces. Those with hair have mostly grey. While there are many valued years of experience within those that run the model railway club and association scene, there is a desperate need for new blood.

Back in the 1970s, club committees were made-up of a few old heads and quite a few youthful 30 and 40 year olds. Many of the latter are still around and in their 70s. They can keep their clubs going for now, but what of the future?

There are quite a few in the hobby who see the need to concentrate on the young, the children, to ensure a future for model railways. While this may be so in the long run, for the near future there is a greater need to keep the model railway scene going. The clubs run exhibitions and provide a means for personal contact, something the web cannot replicate.

Granted, the new blood has to come from younger faces and times have changed, with many in the hobby having family-rearing responsibilities and thus lack the time to volunteer. But until new, fresh volunteers are found, the future for model railways is not as bright as it could be.

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ON THE COVER: This issue concludes the coverage of John Reid's superb HO scale Reids Flat. Our cover photo shows 2534, one of the two Cowra-allocated superheated members of the Z25 class, crossing Gunning Creek on an up branch mixed from Abercrombie. The billabong on the left has almost dried out, but it looks like the chap sitting under the tree, waiting for his billy to boil, still thinks it's a good place to roll out his swag and wait to prey on any passing jumbucks... Photo by John Dennis.

Relax with Model Railways

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AT ISSN 0045-009X

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EMAIL: amrmagzn@tpg.com.au

WEBSITE: www.australianmodelrailways.com

FACEBOOK: <https://www.facebook.com/pages/Australian-Model-Railway-Magazine/486890978118754>

DISTRIBUTION: Subscriptions, SCMRA members, hobby shops and Associations by SCR Publications; newsagencies and bookstalls by Network Services (A division of ACP Magazines).

CONTRIBUTIONS in the form of articles, photographs, hints, Letters to the Editor, drawings or trade press releases are welcome for publication in this magazine. All items received will be acknowledged upon receipt. Contributions can be made as 'hard copy' and/or electronically. Contact amrmjmes@tpg.com.au before submitting electronically. Please pack photographs and diagrams between stout cardboard before posting. Indicate whether photographs/slides are to be returned.

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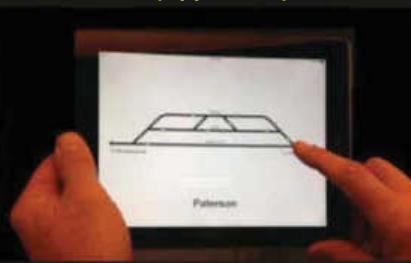
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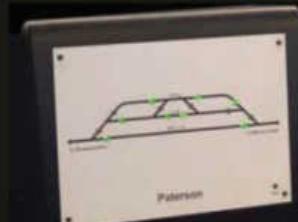
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Victoria:

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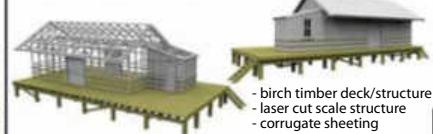
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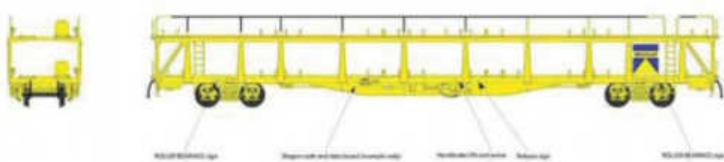
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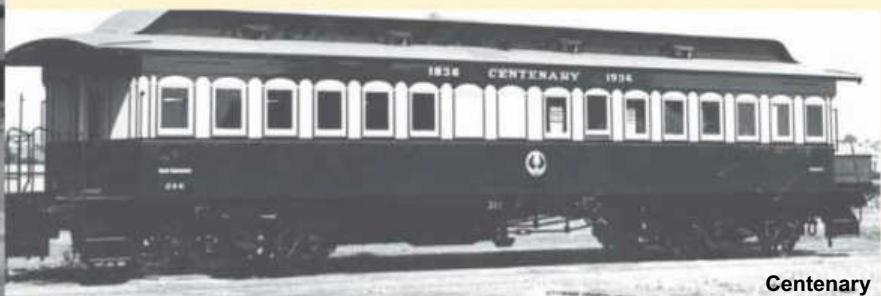


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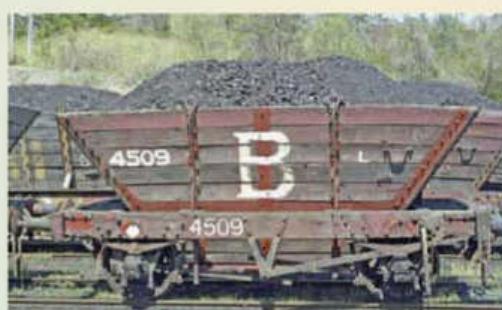
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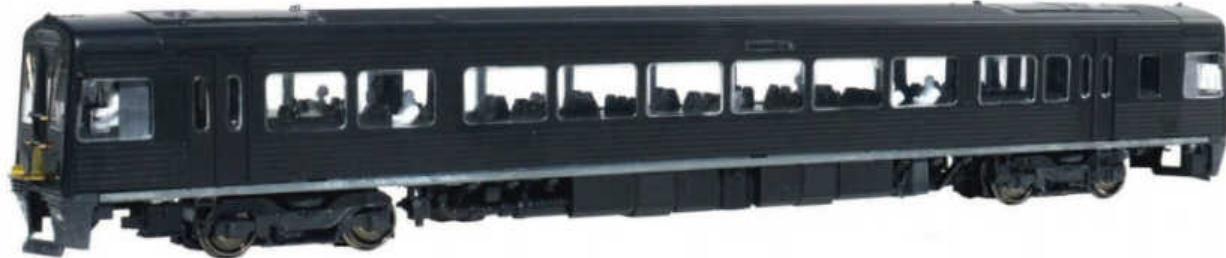
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REIDS FLAT

John Reid completes the description of his HO scale NSWGR home layout set in the Cowra area. Photos by John Dennis.

▀ The diesel era comes to Reids Flat. Appropriately, twilight is gathering as 4917 rolls into the yard with a down goods. The junction is controlled by the elevated interlocking frame on the left, but it doesn't need to be attended for the arrival of this train on the main line. The ground frame on the right controls access to the back road and the goods sidings.

▲ The station master is moving into position to exchange the staffs with the fireman on the up mixed approaching the platform. Once the mixed departs, the road will be set for the down goods standing in the loop and when the driver of 5412 has possession of the staff for the section ahead, the double-headed goods will continue on its way to Cowra.

◀ The up 'Cowra Mail' via Goulburn has paused at Reids Flat to attend to passengers, mail and parcels. To allow station work to proceed undisturbed, 3288, allocated to Cowra during the early 1960s, will be uncoupled and run forward to take water while the carriages remain standing in the platform.

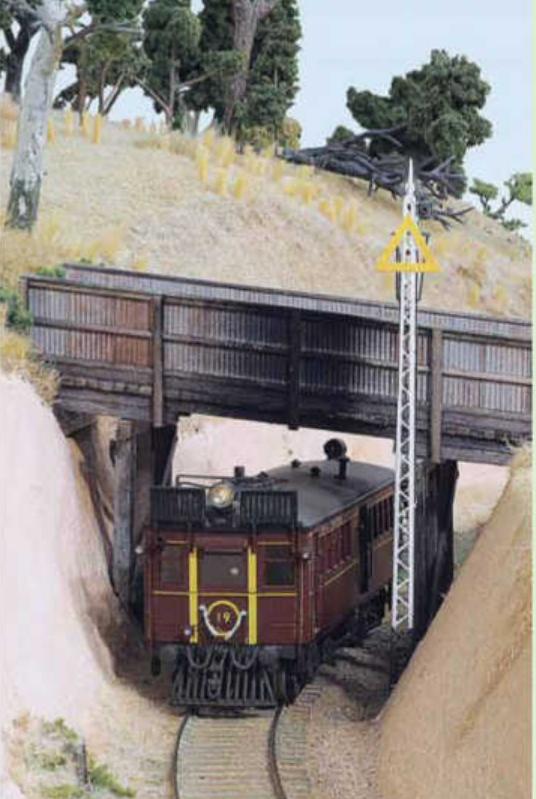
Continued from pg22 of AMRM Issue 314 (October 2015)

Scenery

Construction of the rock outcrop, the ridge along the back of the layout and the high ground above the tunnel relied upon the usual expanded foam, plaster bandage and rock moulds. The exposed rock areas were stained with grey fabric dye and then sprayed with diluted bleach. This treatment created some interesting variations in colour and weathering effects. The materials and methods used to create ground cover have changed substantially over the life of the layout. Initially I used a product called Tuft, which was dry plaster mixed with powdered pigments to represent various soil and grass colours. This material was very effective in reproducing the colour and various textures of soil and some of it can still be seen on the layout. After Tuft went off the market I used artist's acrylics or coloured sand from Chuck's Ballast to colour earthworks, bare

ground and roads. Grass produced using Tuft was not very convincing and was soon covered with Woodland Scenics ground foam. I was never really satisfied with the colour or texture of ground foam grass, either, so when electrostatically applied grass came on the scene I was very keen to try it. Colour was an issue with most of the European grass fibres, but I found that blending Woodland Scenics 'wild honey' and 'harvest gold' in various ratios produced the dry grass colours that I wanted. I added a little light green to the mix for use along the creek and 'winter grass' to provide some variation in other areas. I used a Noch puffer bottle to apply short fibres and a friend's home-made electrostatic applicator for longer fibres. I found that earthing the applicator to long screws inserted under the baseboard more effective than sticking nails into the scenery.

Most of the trees on the layout are meant to represent gums of some sort or other and are used in groups along the



▲ The down Abercrombie rail motor has crossed Gunning Creek and is tackling the 1 in 70 grade along the ridge behind Reids Flat. The inclined, single-lane road bridge shows evidence of the passing of many hard-working locomotives.

back of the layout where they are not normally subject to close inspection. These were made using Woodland Scenics plastic tree trunks or twigs covered in clump foliage. Extending the lower part of the plastic trunks with dowels made them look a little more like gum trees. The trees at the front of the layout represent other species, such as poplar, willow and peppercorn, which are found in most country towns. These trees have aircraft control cable armatures and use ground foam or commercial foliage material to represent leaves. The methods used to make this sort of tree are well documented in various books and magazines. The steel cable can be difficult (and painful) to work with, but the finished trees are very robust and look a bit like the trees they are meant to represent. The 'river gums' in the creek bed were made using the techniques described in an article on the trees on *Beyond Bulliac* in AMRM Issue 196 (February 1996). Other foreground trees were made from commercial plastic or white metal armatures, painted and covered with clump foliage material. The only off-the-shelf trees are the pines in the backyard of the pub and the palms behind the station building. Most trees have nails in their bases which plug into dowels glued into the 'ground'. This allows the trees to be easily placed and removed, but more importantly, it prevents damage to the foam and thin plaster shell forming the scenery.

The baseboard top was lowered to create the low ground around the creek. Lengths of ply, supported on risers, formed the embankment roadbeds. The embankment sides were made from segments of Cane-ite. Each segment was cut to butt up to its neighbour and to lean against the embankment road bed at the desired angle. The segments were glued

in place, sanded and filled to form a smooth curve. This approach may have been more time consuming than the usual methods, but it did produce the regular appearance of what is, on the prototype, a carefully engineered structure. Real pebbles were used to represent rocks in the creek and gloss Estapol was used to form shallow pools of water. I used Estapol because I wanted to represent the colour of near-stagnant water rather than a clear, flowing stream. The reeds along the banks of the creek were made from clumps of Woodland Scenics fibres cut into manageable lengths, dipped in glue and positioned. The tufts were trimmed to the required height after the glue had set and more tufts were planted between them. The second lot of tufts was then trimmed and the process continued until the required density and a seemingly random distribution were achieved.

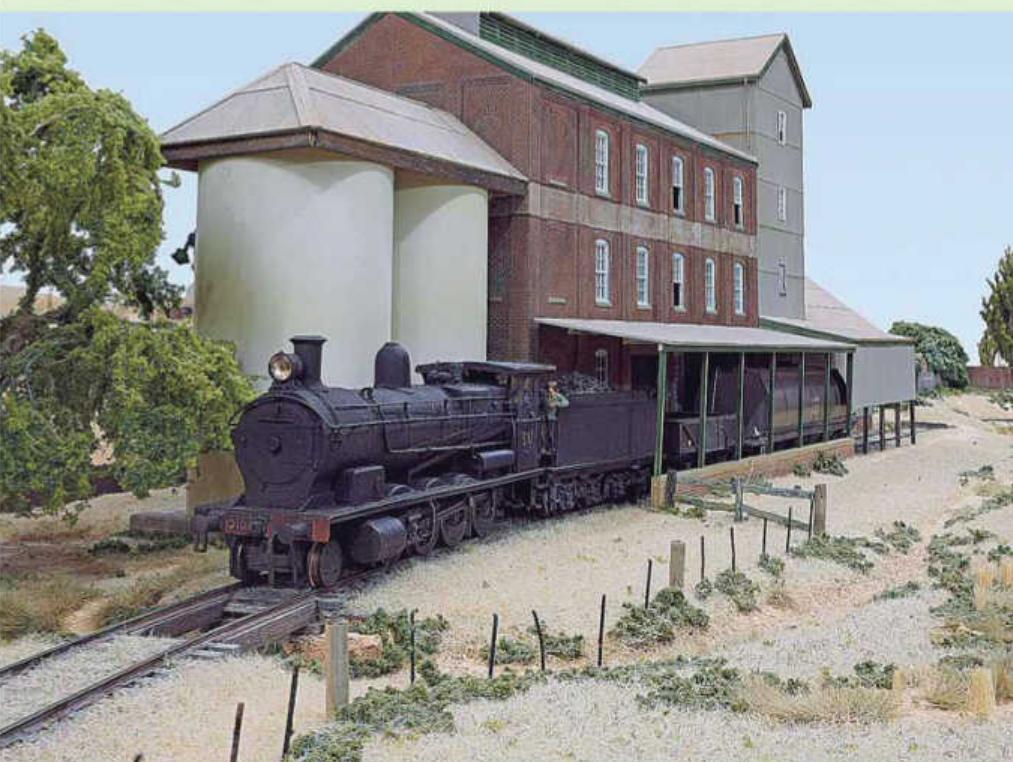
The only backscene on the layout is at the left-hand end between the rocky outcrop and the silo. Like most backscenes, it is most effective when viewed from a particular direction which, in this case, is along the yard from close to ground level. If memory serves me right, the artwork was by Ridgey-Didge. Cutting the printed sheets to reduce the height of the hills also solved the problem of matching the colour of the sky on the back scene to the wall. The back wall is painted light blue and relies on the high ground along its length to add some depth to the rest of the layout.

Structures

All of the railway buildings and structures are models of standard NSWGR designs. Those that were not available as kits were scratchbuilt using Greg Edwards' Data Sheets plans, line drawings published by the railways and photographs. The few buildings off the railway premises are representative of structures that could be found in most country towns and were based on photographs I took in the back lanes of several country towns, plus magazine articles. The larger structures have been constructed on bases which are let into the layout surface. This was done to allow them to be taken off the layout if it had to be relocated. It also made the structures easier to work on and helped to avoid the unrealistic gaps around foundations that can be created by simply placing structures on the layout surface.

A number of printed cardboard kits were used in an attempt to save time and money. Considering the strengthening, cladding and detailing they required, I'm not sure that they saved much time, but they were relatively cheap and provided a good lead-in to scratchbuilding. The silo, loco shed and the pub are the only surviving cardboard structures. I am happy with the way the loco shed turned out, but the silo is still regarded as temporary and will probably be replaced in the future. The pub has been extended at the rear and

▼ The Numby Flour Mill Pty Ltd was one of the larger businesses in the district. Numby was the original name of the full-sized Reids Flat and is still the name of the Parish. Grain was off-loaded and bagged flour was shipped out from the covered siding beside the mill. A timber baulk culvert crosses the drain in the foreground.



► For many years Reids Flat was an out-depot of Cowra, with Cowra Loco providing locomotives, swapped over every couple of weeks, to work the Abercrombie branch. On this occasion, saturated 3041 is the rostered locomotive and is crossing the very lightly constructed Deane-type trestle across Gunning Creek with an up train from Abercrombie. As it is summer, the creek is almost dry.

clad with brick paper and corrugated iron. The signwriting on the front of the building and the KB advertisement on the side were produced on the computer.

The station building is a standard NSWGR B6 design and although some kit parts were used, it is mostly scratchbuilt. The signal box, goods shed and the 5t gantry crane are kits. The dilapidated grain shed was scratchbuilt. The roof was made from plastic sheet clad with corrugated aluminium. It is supported on rail posts at one end and on a ply box covered with hay bales at the other. About 1200 individual bales were made from Cane-ite to complete this structure. The combined sheep and cattle trucking yard is modelled on the NSWGR T5 design. The general arrangement and leading dimensions of the yard were readily available, but getting more detailed information and useful photographs was not so easy. Most of the yard fencing was made using thin skewers for the posts and 1mm ply strips for the rails. The level crossing keeper's house is a kit modelled on a prototype that can still be seen throughout NSW. The sheds and fences along the laneway and the garage were scratchbuilt using thin ply and corrugated aluminium. The grain merchant's store is largely scratchbuilt, but the ends of the building are from a kit. The brick part of the flour mill is a modified Walther's kit, but the rest of the structure is scratchbuilt. It is not a model of a particular mill, but many of its features are based on a much larger mill at Gilgandra.

I resisted (in a couple of instances without success) the temptation to add detail for its own sake, but I did want to include many of the more mundane features that could be found in most railway yards in the steam and early diesel eras. Some of the most obvious features in a railway yard were connected with safe working. In addition to the signals, I have installed some facing point lock covers, an elevated interlocking frame at the junction and a ground frame, with point rodding and a catch point, at the up end of the goods yard. Most of the castings used have come from the Uneek range. The bracketed sig-



nal was made using a whitemetal cast post and etched brass arms and details. Spectacle glasses were made from Micro Krystal Klear tinted with food dye. A Heritage Models signal kit provided the mast for the branch landmark and although not identical to the NSWGR lattice pattern, it's close enough for me.

Telephone, power poles and fences are also obvious features. Most of the telephone and power poles were made from Rix plastic kits. The telephone poles along the branch were made from Code 55 rail and Rix crossbars. Most of the railway fencing used scrap rail for the posts and chemically blackened, straightened sta-

ples for the intermediate pickets. The railway boundary fence along the front of the layout is constructed this way and has proved a very effective deterrent to habitual leaners. With the exception of the fence beside the lane I did not attempt to represent fencing wire. Cattle grids, made from Ratio picket fences, have been installed at the level crossing to protect the yard and main line. I didn't have a copy of Greg Edward's Track Manual at the time so I modelled them from photographs. Some of the smaller items such as platform scales and push bikes are etchings from the UK. They are 4mm scale, but it's not too obvious.



► Jack of all trades, the 32 class could be found on passenger, mixed and goods trains throughout NSW. Low-framed 3273 is seen here crossing the Whitton-style ballast deck trestle over Gunning Creek with a Cowra-bound down goods.



◀ By the mid-1960s Reids Flat had lost its regular steam locomotive, leaving a goods train operating through from Cowra to meet the needs of industries and primary producers along the branch line to Abercrombie. In this view, 4917 leads a short up train of louvred vans down the grade towards Gunning Creek and the junction at Reids Flat.

Trains and Operations

The period I had originally intended to model was the early 1960s. However, my interests have broadened since then and now extend from the early 1960s until a year or two after the elimination of all steam from the west sometime in 1972. Because the railway infrastructure remained much the same, different stages in the transition from steam to diesel can be represented by changing little more than the locos in use on the layout. For simplicity's sake, and because it's the period I find most interesting, the images and description of trains and operations in this article have been confined to the early and mid-1960s when diesels had made some inroads, but steam was still dominant.

To provide some sort of justification for the trains I run, other than "it's my railway", I have made some assumptions about how the Cowra to Goulburn railway might have developed. Part of the argument supporting the proposed Cowra to Crookwell railway was that it would shorten the distance by rail from Cowra to Sydney by 30 miles (50km). If this was accurate and the line had been

built, it may have resulted in traffic, which would otherwise have to travel via Lithgow to Sydney, being diverted over the Cowra to Goulburn line. This in turn may have seen the line become an important cross-country link and warrant its upgrading over the years to handle heavier and faster trains. In my vision of the line in the early 1960s most traffic was still worked by C32 and Standard Goods engines, but upgrading works carried out in the 1940s and '50s had resulted in the Way and Works Branch agreeing to the restricted use of C36 and AD60 locos on some goods services. As the Abercrombie branch was not upgraded, no steam loco larger than a C30T was permitted to work over it. By the mid-1960s, 49 class diesels were making regular appearances on the cross-country line and on the branch, but the use of mainline diesels between Cowra and Goulburn was still a few years away. Passenger services were provided by the 'Cowra Mail via Goulburn', a daily rail motor between Cowra and Goulburn and mixed trains timed to connect with some mainline trains at Goulburn. Several goods trains ran between Cowra and Goulburn each day, as well as a pickup

goods in each direction. Extra trains were run as required to move seasonal traffic such as wheat. Reids Flat was a sub-depot of Cowra Loco and had the use of one of their C30Ts, for a few weeks at a time, to work the mixed train to and from Abercrombie. By the mid-1960s, efforts to reduce operating costs saw the end of regular steam on the branch. From that time goods traffic was handled by a train working from Cowra and passenger services were provided by a rail motor based at Reids Flat.

Very little coaching stock is needed to run the regular passenger services on Reids Flat. The usual composition of the only locomotive-hauled passenger train, the *Cowra Mail*, is the once common BS, TAM, FS, and van. The only other passenger car in regular use is a Workshop 5 CR composite sitting car normally seen on the tail end of a mixed train. No NSW railway line would be complete without a rail motor or two. A CPH rail motor and a GT 5 ton trailer meet the needs of travellers on the branch and 620 class two-car diesels provide the passenger service between Cowra and Goulburn. A 600 class diesel train would be more appropriate to the early 1960s, but the 620s will have to do for now. The goods wagons on the layout represent those in common use in the west during the 1960s and much of the 1970s. Four-wheeled and bogie wheat hoppers, stock wagons, louvred vans and open trucks predominate. Most of the S and K open trucks are fitted with tarpaulins covering notional loads of wool, hay, timber and superphosphate. Victorian Railways bogie exchange vehicles add a bit of colour to one or two of the goods trains.

I have not developed a timetable for operations, although I have worked out a number of sequences involving two or three trains, or everything on the layout, that reflect how the line might have been worked. The more comprehensive sequence can keep a driver or two, plus a station master, busy for several hours or more, depending on the amount of shunting performed. I am not a big fan of timetabled operating sessions, but I must admit that following even the most basic pre-planned sequence introduces a sense of purpose which is hard to create otherwise.

Developments

I have been working on this layout for



◀ When a rail motor failed, or was otherwise not available, anything with wheels could be rostered to fill in, especially during busy holiday times. In this case 3041, hauling an FJ second class compartment car and a brake van, has been pressed into service on the run from Cowra to Goulburn. Prominent in the foreground are the two water columns serving the loop line, a very common sight on the steam-era NSWGR; the two columns were spaced to service two Standard Goods locomotives at the same time.



▲ Having completed shunting, and being in possession of the staff for the section ahead, the driver of 3273 eases his departing train over the double crossover at the down end of the back road. The up pick-up had been 'put away' in the yard while the procession of small trains that characterised NSWGR lines in the steam era was dealt with by the safeworking staff. The road crossing under the CW provides access to the goods shed and loading banks. A hand operated tricycle sits outside the small gang shed, while behind the train is the now decrepit grain shed, by this time used only to store baled hay. In the distance under the road bridge a rake of BWH, RU and sheeted BCH hoppers stands next to the silo.

▼ During a break in shunting 5167 takes water from the column at the down end of the platform. The fireman is sitting on the tool box, ready to call for the driver to turn the water off before the tender overflows, as the last thing he needs, by the look of the grey skies above, is wet feet!

over twenty years. Progress has been slow by anyone's standards and has probably had something to do with the number of times large areas were torn up and rebuilt. No section of track between the level crossing and the rocky outcrop has survived unaltered and the silo and the crossing keeper's house are probably the only structures that still occupy their original positions. This was not an efficient way to build a model railway, but I am now happy with the overall arrangement, if not the detail, and don't expect to make any more big changes. I had planned to extend the layout by building a 7.5m by 600mm shelf along the remaining free wall of the train room, but, as that space is now occupied by a 7mm scale model based on the former Albury loco depot, Reids Flat won't be getting any bigger.

I would like to acknowledge John Dennis's contribution to this article and thank him for the time and effort he devoted to photographing the layout and the care he took to present it in the best possible light.



3D Printing

An Overview

Dain Penman, proprietor of Madasu Model Trains, takes us through the basics of 3D printing.

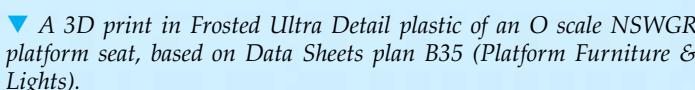
Photos by the author.



▲ A screen shot from the 123D Design 3D design program of a NSWGR signal box based on Data Sheets plan S13 (1920 Precast Concrete Signal Cabins).



▲ A digital rendering of the signal box from the Shapeways site.



▼ A 3D print in Frosted Ultra Detail plastic of an O scale NSWGR platform seat, based on Data Sheets plan B35 (Platform Furniture & Lights).

Having been around in different forms for many years now, 3D printing's popularity in the consumer market has taken off in recent times. This opens up a world of possibilities for railway modellers. It is technology that can appear intimidating, but, especially with the availability of 3D printing services, it truly is within the reach of anyone with basic modelling and computer skills.

This article will take the reader through the process of designing a product, then through using a 3D printing service to get your models printed. Using a printing service eliminates the cost and set up issues relating to running your own printer and provides access to a higher quality of printing and greater range of materials.

Materials

Most providers will have a variety of materials available, all of which are suited for different models. Most model railway items are printed in plastics, due to the detail requirements, cost and its ability to be painted. Other materials available are metals, sandstone and porcelain.

As with most things in life, material choice is a trade-off. If you want more detail, you expect to pay more for it. Fortunately, even the cheaper options show quite good detail.

The Process

1. **Download software** – the first thing you need is a 3D design program. There are lots of free programs available for download that will do the job and you can always upgrade to something 'higher end' later if you need more features. Some examples are 123D Design, Blender and Sketchup. Personally, I use 123D Design.
2. **Learn the software** – most 3D modelling programs provide tutorials and these are a great idea to do before you start modelling. I know how tempting it is to jump right in, but these provide a good understanding of the basics. Once you get comfortable and start modelling, just search online for help – there is always someone else who has the same question and lots of helpful people out there to respond!
3. **Time to design!** The usual modelling principles stay true – start with something simple, play around and slowly work up to something more complicated.
4. **Select a 3D printing service.** Once you have a finished design, pick a 3D printing service to make your model. I use Shapeways (www.shapeways.com) as they have competitive pricing and a great range of materials.
5. **Upload your design** – upload your model into the 3D printing service and you will see the cost of the item in different materials and whether it has passed the test for each material (See 'Material guidelines' below for details of how to 'pass' a model). Only focus on the material(s) that you want to print in, as you only need a model to be printable in your chosen material.
6. **Review your design.** Before you jump ahead and order your model, have a close look at the pricing and see what you can do to reduce the cost of your model or get more models for not much more cost. Doing this can make quite a difference to the cost of your model. See 'Optimising for price' below for details of how to do this.

7. Order. Once you have optimised for price, you are ready to order. As shipping costs tend to be a flat rate, it can be better value to order multiple models. If you don't want to design more, have a look at what other designers have available to order!

Material Guidelines

Material guidelines are put in place by the 3D printing service to tell you the tolerances of the different materials. Familiarise yourself with the guidelines of the material you are looking to print in before getting too far into your modelling. The main areas to consider are:

- **Bounding box.** This provides the minimum and maximum dimensions for your prints. This tends not to be an issue for most model railway items, as anything above or below the size of the box is usually not too economical to print.
- **Wall thickness.** This is the minimum thickness a wall in your model can be. There are usually different tolerances if the wall is supported or unsupported. A wall in a building is a 'supported' wall as it has other walls touching it on at least two sides, whereas an open door would be an 'unsupported' wall as it only has one side touching another part.
- **Wire thickness.** A wire is anything that is long and slim; Shapeways definition is where its 'length is greater than two times its width'. Wires are supported if they touch something at both ends and unsupported if not.
- **Embossing and engraving details.** This gives you the minimum amount of height and width an engraved or embossed detail needs.

Optimising for Price

Different materials have different pricing guidelines; the following are the main types of pricing and how to reduce the cost:

- **Labour cost.** This can be a cost per item in your file or a cost per file. If it is per item it will repeat for each unconnected item in that file. If you have multiple items, or want to duplicate your item, add a sprue or wire between the items or a shell around them. This will mean that only a single item cost is incurred for that file. A per file cost means you can have multiple pieces in a single file for no extra cost.
- **Material volume cost.** This is simply the volume of the printed material that your model uses. To reduce this cost, you can make walls thinner or hollow out solid items provided you still meet the material guidelines.
- **Machine volume.** This is the volume the model takes up in the machine, based on a 1mm space around the entire model. This means that a small hollow item would take up as much machine volume as a solid one. To reduce this cost, look for parts that stick out or create 'closed' empty space within the model.

Have a Go!

I encourage everyone to have a go at designing something, even just to see how it looks on screen. Consider 3D printing as another skill in your modelling toolkit to use where it works for your layout. It is likely 3D printing will become ever more common and the quality can only improve in the future.

If you would like to test out 3D printing for yourself, but don't want to get involved in the design, feel free to contact me at Madasu Model Trains: www.madasudesign.com/modeltrains/.



WAGON WORKS

GY1080 Building a VR 'One-off'

David Clark kitbashes an SEM inside-sill GY kit into this unique Victorian open wagon. Photos as credited.

The fleet of GY wagons was one of the Victorian Railways' largest classes of goods wagons. Built mainly for bulk commodities, e.g. grain and superphosphate, they were also used for general goods, etc. They were constructed between 1939 and 1954. With conversions from IZ, GZ and HY wagons, the fleet totalled 6,226 by the late 1960s. Of that number, 5976 had inside sills and the rest had outside sills, being conversions from riveted IZ wagons.

GY1080 was unique in being the only inside-sill GY to have a wheel

handbrake out of the 5,976 built with inside-sill underframes. It was built at Newport Workshops as IZ945 (inside sill, welded body) in 1935, recoded to GZ945 in 1954, to HY (1/12/1964), then rebuilt with the higher GY sides sometime between 1964 and 1966, possibly after accident damage. Its final conversion was to a GH covered hopper wagon for bulk grain traffic in 1979.

A very simple kitbash, taking approximately 15 minutes, produces a model of GY1080. Steam Era Models (SEM) produce an excellent kit of the GY (and IZ/GZ) wagons.

Construction

You have two options to produce a model of GY1080:

- Be prototypical and use the correct IZ/GZ underframe, in which case you will need one of each kit and end up with a spare GY underframe (which could be used on other 11'6" wheelbase conversions, e.g. oil tanks), plus spare IZ/GZ sides and ends to find a use for.
- Use a single GY kit only. Whilst not prototypical, I must be honest and say the slightly incorrect underframe will hardly be noticed!

I took the first, more prototypical, option with the model illustrated in this article.

To carry out this conversion you will need:

- SEM GY wagon kit – (your choice

of early or modernised brake rigging depending on your era and what use you may have for the spare underframe)

- SEM IZ/GZ wagon kit (with wheel handbrake)
- Evergreen styrene strip 0.25mm x 0.75mm (0.010" x 0.030").

Constructing Model from Two Kits

Construct only the IZ/GZ full underframe, including the four brackets on each side that will support the door stanchions as per the SEM kit instructions. Put the sides and ends, etc. away as spares.

With the GY parts, after removing the sides and ends, then cleaning them up, the following simple modifications are required:

Ends: On the bottom of both ends (but not in the recess for the cou-

pler), cement a strip of styrene 15mm long of 0.25mm x 0.75mm (0.010" x 0.030") so that it overhangs on each side. Once firmly set, carefully trim the excess at right angles flush at the sides of the coupler recess. Next, on the outsides of the ends at the bottom and along the same angle, very carefully trim off the excess. If necessary, carefully file the join flush with the front of the ends (See Photos 1 and 2).

Sides: on the inside of the sides, just under 1.00mm of material needs to be removed with a sharp craft knife from the inside of two outside vertical stanchions i.e. where these will go over the brackets on the underframe. This will be apparent when initially test fitting the GY sides and then remove this material and check

each side against the underframe to ensure they will be flush.

Then as per the GY kit instructions, construct and mount the GY sides and ends onto the IZ/GZ underframe and attach handrails, etc. Note that the extended GY ends must cover the ends of the underframe side sills.

Constructing Model Using GY Kit Only

Side sills: The GY wagons have the ends of the bottom of the sills slightly angled up making the vertical ends of the sills slightly shorter. After removing the side sills from the sprue and cleaning them up, with a pair of pliers carefully grasp the angled up ends of the bottom of the sills and bend these down to be straight with the bottom sill. Apply cement to stiffen these bends.

Ends: Add the extensions to the bottom of the wagon ends as per Photo 1 to be flush with the lowered height of the sills.

Construct the GY wagon as per SEM Kit instructions.

Completing the Model

Paint and decal to finish. I used SEM Victorian Railways P7 Wagon Red, prototypically correct for my era (1950s-1960s) with 5" lettering for the decals, then a coating of Testor's Dullcote to protect the finish. Alternatively, SEM P8 Wagon Yellow (Hansa) with 7" lettering can be used for the 1970s on.

Thanks and References

Finally, I would like to thank Rob O'Regan and Peter Vincent for supplying the photos of the prototype and David Foulkes of Steam Era Models. Also to Peter Vincent and Norm Bray and their team for producing such a wonderful and inspirational record of VR rolling stock in their books!

Fixed Wheel Freight Wagons of Victoria A – J by Peter Vincent and Norm Bray.

Mark Bau's website: www.victorianrailways.net

Rob O'Regan's website: www.robx1.net

Peter Vincent's website: www.pjv101.net



▲ Peter J Vincent photographed a latter-era GY1080 in Hansa yellow at Glenroy in 1976. Photo courtesy of Peter J Vincent's website: www.pjv101.net.



◀ Rob O'Regan also photographed the end of GY1080 at Glenroy on 13 October 1976, most likely at, or around, the same time as Peter's photo. Photo courtesy of Rob O'Regan's website: www.robx1.net.



1 The ends with the strip of 0.25mm x 0.75mm (0.010" x 0.030") styrene added to the bottom of the ends. The right-hand end has had the strip trimmed to size. Photo by the author.

2 The end of the almost completed model prior to painting. Photo by the author.

▼ The all-but complete model, prior to painting. Photo by the author.



2



Prototype Open Wagon Loads

Rod Tonkin describes some open wagon loads suitable for modelling.
Photos by the author.



▲ A train load of lead concentrates from the Elura mine near Cobar, NSW, prepares to depart behind 4853.

A lot of traffic on our railways was (and is) conveyed in open wagons. The products hauled in open wagons include aggregates, ores and concentrates. The appearance of the load in an open wagon depends on the product's size range, colour and the shape of the load.

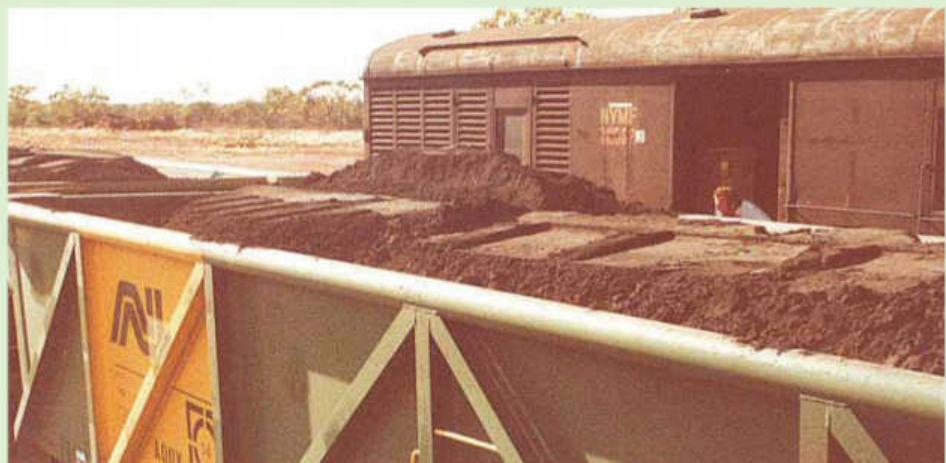
The process used prior to raling depends on the product. Aggregates and ballast are simply suitable hard rock crushed to size.

High concentration ores such as iron ore are sold as lump or fines products; like aggregates they are simply crushed to size.

Metal ores such as copper, nickel, lead and zinc usually contain low percentages of metal. These ores require concentration prior to shipping or smelting. The ores are crushed and milled to a fine powder in water as a 'slurry'.

The slurry is conditioned with chemicals and fed into tanks fitted with agitators that mix the slurry with air bubbles injected into the tanks. The metal compounds attach to the bubbles and float to the top. The metal compound-laden bubbles spill over the sides of the tank and are collected in troughs along the side of the tanks. A couple of stages of concentration tanks can raise the metal content from 5% to 50%. The ensuing concentrate can then be smelted to extract the metal.

This photo essay shows some of the different ore, concentrate and ballast loads that can/could be seen in NSW and WA.



▲ North Limited's Elura mine near Cobar thickened their lead and zinc concentrates and then filtered the concentrate slurry to produce a dried concentrate suitable for ship loading. Most of the concentrates were railed in sealed containers to Newcastle for shipping. Once a month a train load of a dozen open ore wagons carried lead concentrate to Port Pirie. The wagons were filled by front end loader and the loads packed down by the loader bucket. The photo shows a vehicle from one such train in 1984.

TABLE OF ORE SIZES AND COLOURS

			Size (all dimensions in mm)			
			O Scale	HO Scale	N Scale	Colour
BHP-Billiton						
Mt Whaleback	Top size	100	2.3	1.1	0.6	Purplish brown to almost black
	Min size	0.01				
Ore body 29 fines	Top size	6	0.1	0.1	0	Mustard yellow
	Min size	0.01				
Ballast	Top size	50	1.1	0.6	0.3	Grey
	Min size	45	1	0.5	0.3	
Robe River Iron Ore Associates						
Sized ore	Top size	300	6.9	3.4	1.9	Reddish brown
	Min size	0.01				
Run of mine ore	Top size	1500	34.5	17.2	9.4	Reddish brown
	Min size	0.01				
Portman Mining						
Lump ore	Top size	32	0.7	0.4	0.2	Reddish brown
Fines ore	Top size	6	0.1	0.1	0	Reddish brown
Elura Mine						
Lead concentrate	Top size	0.01	0	0	0	Black
Cobar mines						
Zinc concentrate	Top size	0.01	0	0	0	Brownish grey



▲ Cobar Mines, in contrast to the approach used by the Elura Mine, filtered their thickened concentrates directly into open wagons spotted beneath the disc filters. This loading method produced steep piles of concentrate in the wagon, as seen in this image showing loaded NOHF wagons and 4903 at Cobar station in 1985. The concentrates were shipped to Port Kembla for smelting.



▲ BHP-Billiton Iron Ore mine the massive Mount Whaleback iron ore deposit near Newman in WA. The secondary crushed ore is loaded into ore cars by thirteen swing-down chutes below the ore stockpiles. The heap of ore in the car does not fully cover the floor of the ore car. This image shows a train conveying Mount Whaleback ore loads leaving the mine site in 1988.



◀ BHP-Billiton Iron Ore also mined a special fine-grained Marra Mamba iron ore at the nearby Ore Body 29. Initially the Marra Mamba ore was loaded by front end loaders. In 1988 an in-motion mass flow train loader was installed. The mass flow train loader loaded 96 ore cars in less than an hour with around 10,000 tonnes of ore. This train loader produced a flat-topped load of ore in the ore car. This photo shows a wagon load of Marra Mamba ore loaded from the mass flow train loader in 1988.

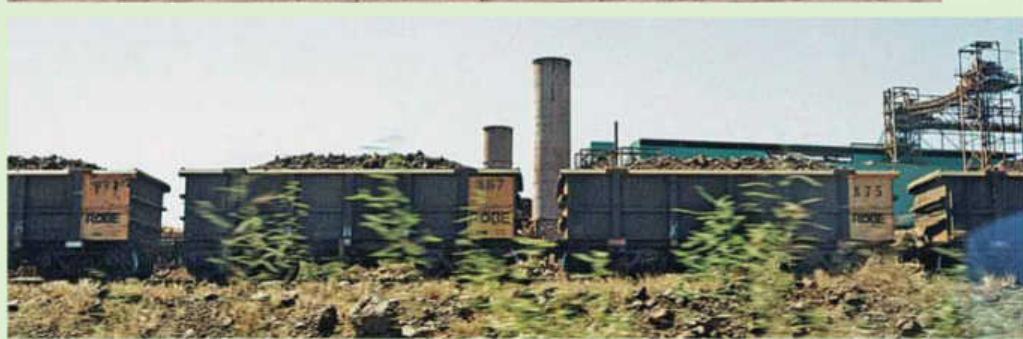


◀ A mixed load of ore from two different mines in 1988; the ore cars ahead of the mid-train assistant locomotives originated at Mount Whaleback, while the trailing cars were loaded by front end loader at Marra Mamba, prior to the introduction of the in-motion mass flow train loader.

► Truck 217, a 200 tonne capacity WABCO 3200, ready to dump a load of run-of-mine Marra Mamba ore into the crusher in 1989. The hand railing around the truck cabin gives an idea of the size of the truck and its load. This is why iron ore is crushed prior to railling.



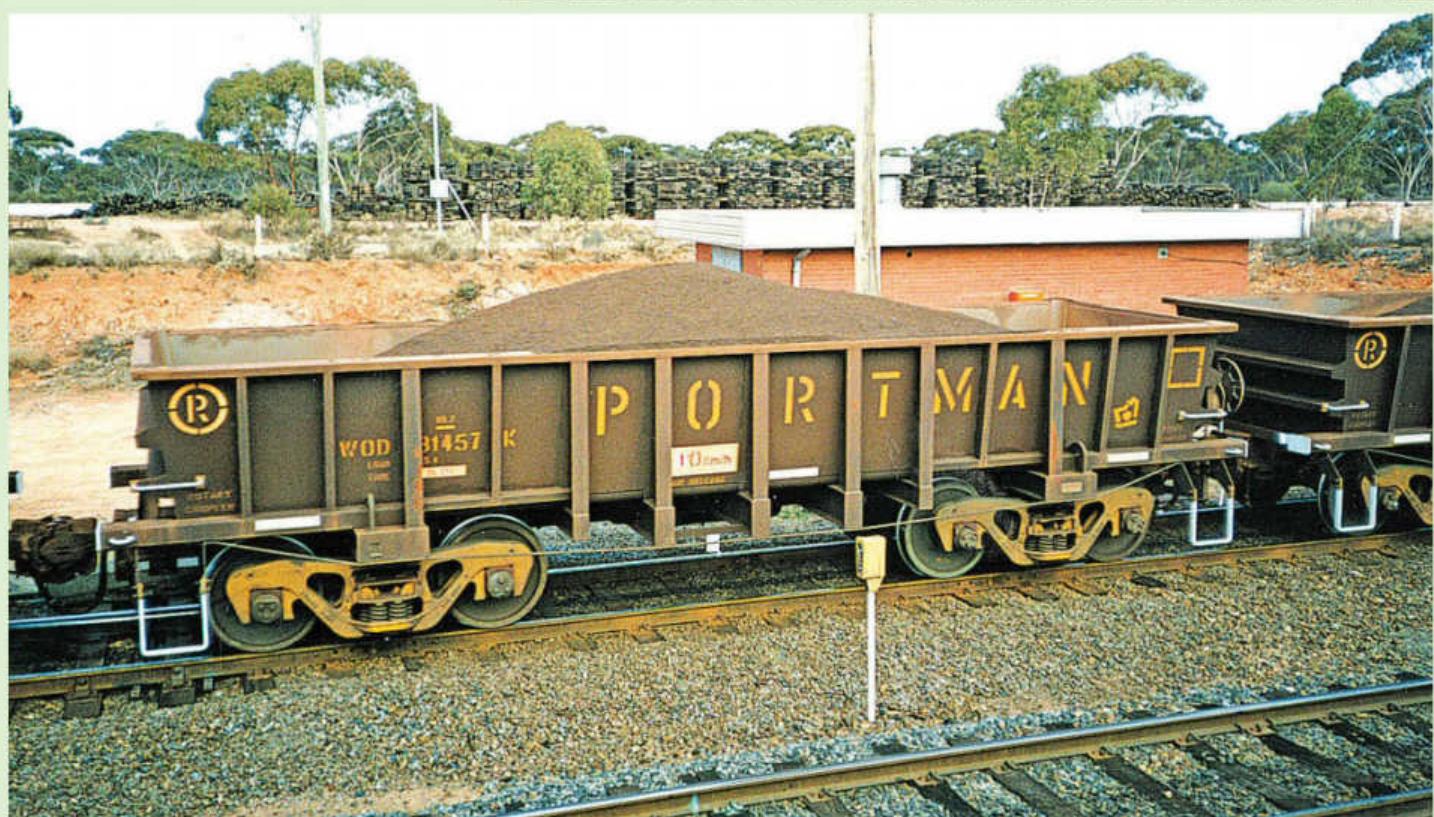
► Robe River Iron Ore Associates initially shipped run-of-mine ore to Cape Lambert for crushing. This resulted in boulders of up to 1500mm wide being transported by train. The ensuing damage to ore cars and infrastructure prompted installation at the mine of toothed roll crushers to reduce the top size of the ore to 300mm. The ore is loaded at the mine by an apron feeder. The smaller sized nuggets of ore can be seen in this 'grab shot' from the car at Cape Lambert in 1998.



► BHP-Billiton Iron Ore operates a ballast quarry to maintain its isolated 460km railway from Newman to Port Headland. The ballast is loaded into ballast cars by front end loader. This image shows one of the side dump ballast wagons loaded with ballast in 1988.



▼ Portman Mining mines iron ore at Koolyanobbing in Western Australia. The mine loads its ore into standard gauge ore cars with front end loaders. The ore is shipped from Koolyanobbing to Esperance via Kalgoorlie. This photo shows a Portman Mining car loaded with lump ore in 2003.





UNDER CONSTRUCTION

A New Railway Created

Brian Shields begins construction of a new layout. Photos by the author.

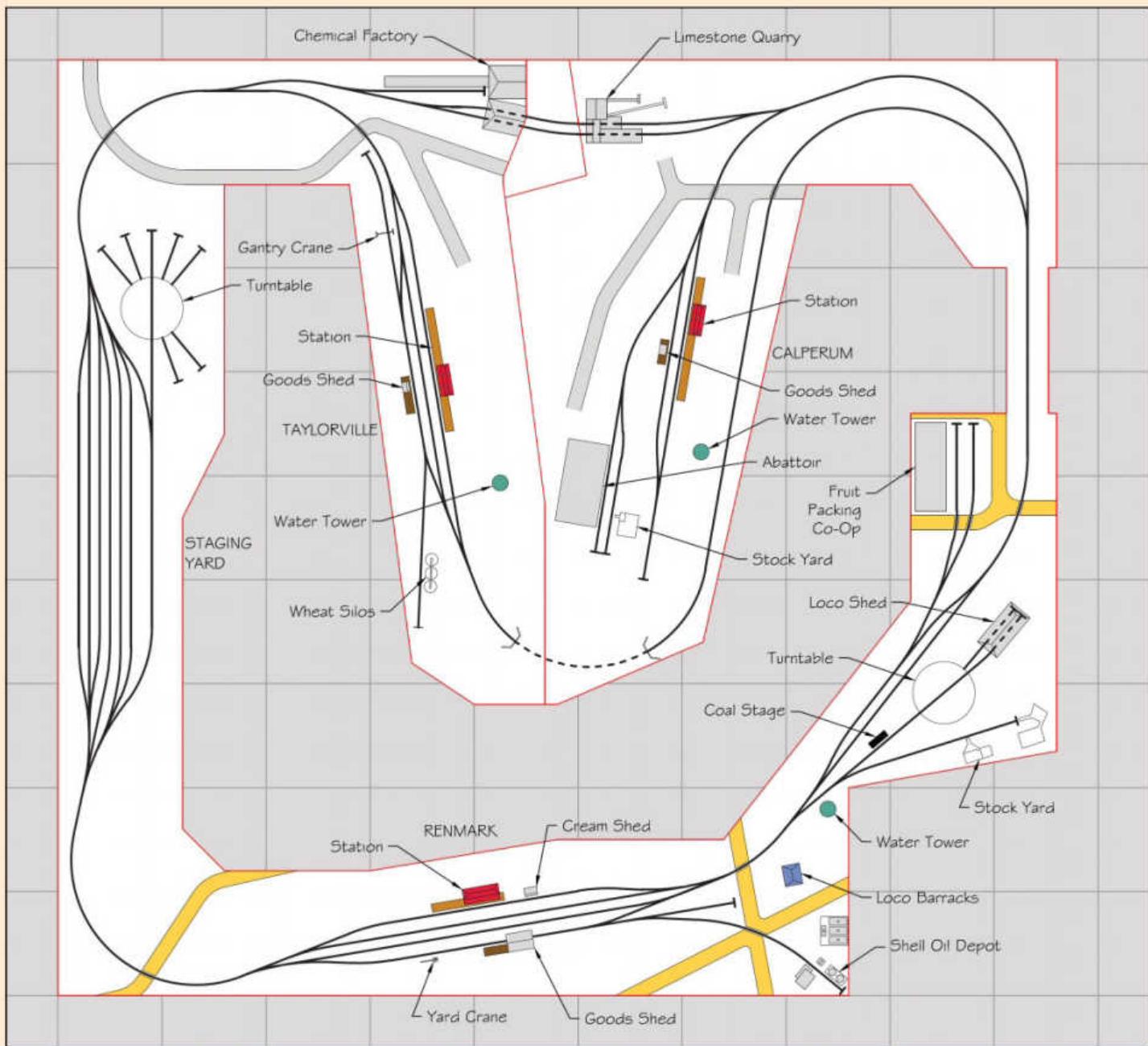
There have been many model railways in the Shields' household over the past thirty-five years or so. Most have had one thing in common; they were never finished. Also, the majority left me with the feeling that something was lacking, although I was never quite sure what.

The last incarnation was a small 'test track' that expanded into an oval approximately 2.4m x 1.3m (8ft x 4ft) that was used to try out different techniques 'for when the next proper layout is built'. Sounds familiar, doesn't it? I must admit that version was quite useful as its supporting frame was on castors, the top tilted onto its side and the whole thing could be

wheeled from room to room, after removing the rolling stock [Photos 1 and 2].

In 2006 my wife, Pam, and I decided to build a new house and this created the opportunity to design and build a new 'proper' layout, but this time it had to be planned and executed properly. A hobby room was included into the new house design, so finally the tin shed at the bottom of the garden would no longer be the site of the railway. No more 4°C in July and 40°C in January...

The room itself is 4.5m (14ft 9ins) wide by 8m (26ft 3ins) long, with two windows set some 1.8m (6ft) from the floor and equally spaced along one long wall, with a door centred on the facing



wall. The room must also cater for my workbench, bookshelves, magazine collection and other storage needs of a modelling nature. It is also carpeted and is included in the ducted air conditioning system; heaven!

When commencing the design of a new layout, the collective wisdom directs that we should define the what, where and why of the railway we are going to model. The 'what' for me was surprisingly easy, and defining the 'where' was actually fun. Some thirty years ago I changed from modelling the English LNER in 4mm scale to South Australian Railways (SAR) in 3.5mm scale, so that set the scale and the prototype – well nearly.

Living and working in Renmark for many years and starting to write a book on the railways in the town (still in the computer, but some derived articles appeared in the ARHS *Bulletin* (now *Australian Railway History*) in the late 1990s), the Riverland and the Mallee Region seemed to be the best 'where' for the layout. I did not want to try and reproduce the prototype, however, but develop a possible and plausible extension to the SAR.

The so called 'Northern Route' railway from Morgan to Renmark along the northern side of the Murray River, first raised by the residents of Berri in 1913, attracted my attention. This line obviously was never built, but did have the added benefit of being looked at very seriously in the 1940s as a possible east-west standard-gauge route. The proposal was to join Hay to Renmark then across to Morgan and up to Port Pirie. This plan also never eventuated, but what if it had?

One of the things I have always liked on other peoples' layouts is a port scene. Notwithstanding the wonderful work done by many master modellers in SA, a river port did not quite fit the bill. A line to the seaside was needed. I currently work in Balaklava in the Lower North region of the state and have a lot of contact with the Yorke Peninsula. There was the setting for my new railway! Many different types of agriculture, mining, salt production and other industries would all support my new branch line and, as there has never been a real railway there, I could start absolutely from scratch.

To provide the setting for the railway and to ensure that the imaginary branch had a realistic basis for its operation, I sat down and imagined a history for it. It was during this process that I somehow moved from a branch line of the SAR, to a totally fictitious railway company operating a separate railway that interchanges with the SAR. However, as that fictional history started to develop, including the reason for the railway's existence, its operating principles and even the rolling stock numbering system, the setting somehow reverted to the Riverland.

So began the planning and building of the Morgan to Yamba North Eastern Railway. Yes I know, it does initialise to MY NER, and as one friend from way back noted, if I was a director of this new railway that would make me a NERD. As any good director should, I look forward to the day that the company makes a profit from its own endeavours and the sale of trackage rights to both the SAR, and potentially the VR, with plenty of their rolling stock cluttering up the NER sidings.

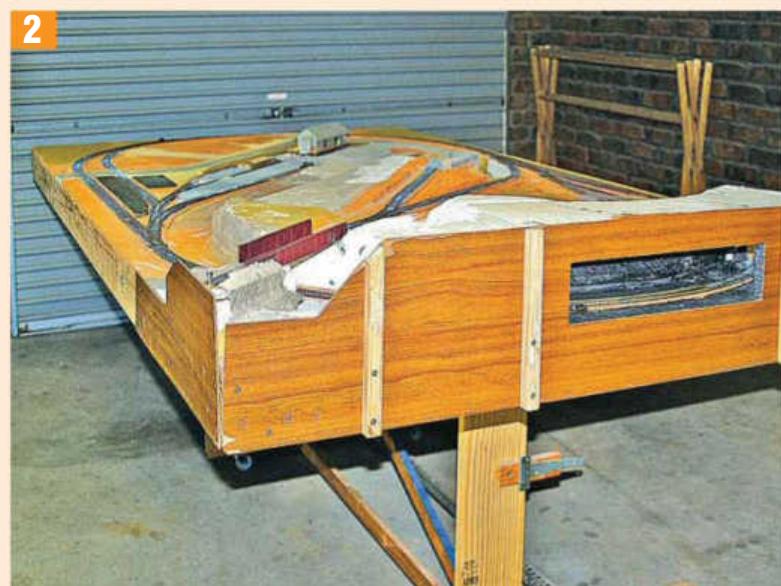
The house was completed in 2008 and the first few years were devoted to all the other things required of a new house such as paving, a garden and the like. All during this period, however, planning of the new layout was progressing and, finally, in 2010 the first timber was put together for the beginning of my North Eastern Railway [Photos 3 and 4].

The current track plan (is any track plan ever final?) is shown. The construction is scheduled for two stages. The first stage is the fiddle yard and Renmark station yard around as far as the fruit Co-Op sidings and stopping at the edge of the swing bridge entry [Photo 5]. The second stage is 'the rest'.

The track plan is designed to have Renmark station as a reasonable representation of the actual facility and I think it does an acceptable job; at least some ex-railway staff have recognised it for what it is supposed to be. The article titled *Rails into Renmark* in the February 1999 of the ARHS *Bulletin* describes the original



The 'foldaway' layout being readied for an operating/construction session. When not in use the top section stands vertical and it was stored against the garage wall. The hinge is a broom handle threaded through matching holes in the top and the supporting trestle.



The 'foldaway' layout ready for locos and rolling stock to be placed and operation to commence (or more scenery to be added). This is a very useful design for the space/time limited modeller.



► The first two sections of the new layout. Construction is conventional timber open grid framing with a with plywood top surface.

station yard in some detail. Other than the replication of the 1947 arrangement of Renmark station yard, the rest is fictitious to enable the inclusion of elements that I like and can provide a fair degree of operation, such as the mine, chemical factory and abattoir.

The fiddle yard represents both the eastern (Yamba) end and eventually the western (Morgan) end of the railway and, although it is a run-through yard, the operations of the layout will be, or at least should be, point to point. As I go through the continuing journey of building and, eventually, operating the layout, I hope to be able to write about what I am doing, and what is happening at the time. My computer and of course the magazine Editor permitting.



The third section of the new layout under construction, showing how the basic painted backdrop was added even before construction of the baseboards was completed.



The first stage of the new layout with most of the track for Renmark's 1950s configuration in place (with the notable exception of the 75ft turntable), plus the photo backdrop installed. Trains can run, and now to construct the rest of the buildings and the scenery.



The locomotive with the marker lights lit, but the headlight turned off, which this simple adjustment to the 422 class circuitry allows, whereas the standard locomotive can only have both marker lights and headlight on, or all off.

WARNING

This modification requires soldering skill at circuit board level. This modification will certainly void your warranty, so all responsibility resides with the person making the modification.

The Auscision 422 class diesel locomotive includes separate headlights and red and white marker lights. However, these operate in conjunction with each other, rather than being individually switchable. Nonetheless, there are switches enabling you to turn off the lights if you don't wish them to be on. Although this is fine under DC, DCC users may want to make them somewhat more prototypically correct in operation.



Modifying the Auscision 422 Marker Lights

Ben O'Malley modifies his Auscision 422 so that the marker lights work independently of the headlight.

While Auscision have included a new 21-pin MTC socket, they haven't taken full advantage of the features offered by the new socket. The recommended decoders are from ESU, with the Loksound V4 for those that prefer sound or a Lokpilot V4 for those not wanting to make a noise. The only difference between these decoders is that one has sound. Both of these decoders feature six function outputs, but with only the first four

being directly usable. To use the extra two functions, you must convert from a logic level to an amplified output (see sidebar).

This modification is a basic and simple modification which will allow you to use your DCC system to turn the marker lights on (or off) independent of the headlight. This just makes use of the first two unused function outputs and only involves moving some wires around on the internal circuit board.

Modifying the Model

First start by removing the body, this is simply achieved by spreading the body sides slightly to release the four retaining tabs. The body will then simply lift off and can then be set aside.

Next remove the 21-pin DC plug (or your decoder if you have already installed one).

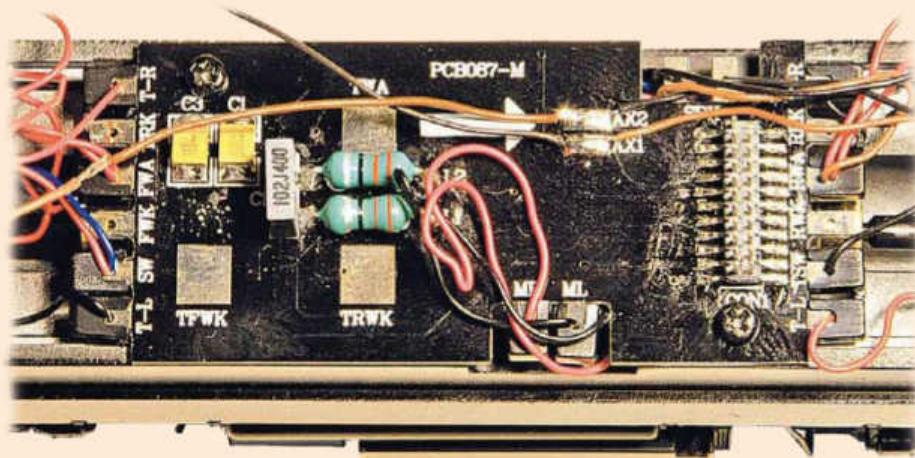
On the circuit board, find the following four wires attached to the included circuit board at the locations marked (RRK, RWK, FRK and FWK). These are the cathode (negative) wires of the marker light LEDs. Just remove the black plastic retaining caps and gently pull the wires out of the circuit board.

There are two solder pads on the circuit board labelled AX1 and AX2. These are located at the pointy end of the big white arrow. Tin these with solder.

Cut two lengths of wire, 50mm long. The colour doesn't matter, but using brown and black to match the two wires from the No.2 end marker lights will make things easier to keep track of. The brown wire is for the white marker light and the black is for the red one. Splice the two extension wires on to the two wires from the No.2 end marker lights and insulate the joins with either tape or heat shrink tubing.

Now solder the brown wire from the No.1 end and the black wire from the No.2 end to the pad marked AX1, then the remaining black wire from the No.1 end with the brown wire from the No.2 end to the AX2 pad.

Install your desired decoder and put the body back on and program the decoder. You will need to remap AUX1 and



The 422 circuit board, showing the modified wiring, including the extension wires spliced onto the existing wiring at the No.2 (left) end. Photo by the author.

'Logical' and 'Amplified' Function Outputs

While almost all decoders allow direct use of their function outputs, you may occasionally come across a decoder that has functions labelled as 'logical'. An example of this is the ESU Loksound decoder with the 21-pin MTC interface.

All decoders have a tiny little computer called a micro-controller on them as their brains. Since they are so small, the power on their outputs is also small and in most cases, is too small to be of any direct use and is therefore only used to provide control signals to other electronic components. These outputs are normally a simple on/off, providing control logic and hence the term 'logical output'.

The decoder outputs to which you can connect have what is called an amplified output. These decoders have an onboard transistor that takes the control logic from the micro-controller and increases the power it can control. This is much like the amplifier in your home hi-fi, taking a small signal from a record player and amplifying it to power your speakers.

AUX2 (decoder outputs 3 and 4) to your choice of function to allow you to turn the marker lights on and off.

While you are on the inside, you might

want to consider removing the two yellow capacitors on the circuit board, as these interfere with the ability to use headlight dimming.



Prototypical NSW Marker Light Indications

The prototype indications used by the NSWGR and its successors until quite recently are:

In traffic:

- Hauling a train – two whites at the front.
- Light engine – two whites at the front, two reds at the back.
- Shunting in a yard – two reds each end (only if designated shunting locomotive, normal indications if shunting a siding in transit).

Crossing another train on single line or refuge on double tracks

- Facing point ahead of the locomotive – white light closest to running line, red light furthest from running line.
- Dead end siding, buffers ahead of locomotive – all lights extinguished.

Prior to 1967

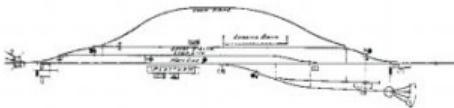
- Hauling a train in daylight – white marker lights lit, headlight extinguished.
- Hauling a train at night – white marker lights lit, headlight lit, except where passing another train or in station limits headlight is to be on low-beam.

Post 1967

- White marker lights and headlight lit at all times, except when passing another train or within station limits, when headlight is to be on low-beam.

Materials Required

- ESU Loksound V4 or Loksound Select 21-pin (sound)
- ESU Lokpilot V4 21-pin or TCS EU621 (non-sound)
- 30 or 32 gauge decoder wire (brown and black)
- 1.5mm heatshrink tubing or electrical tape



IN THE LOOP

Working in Metal

Trevor Hodges took the long way round when it came to scratchbuilding in metal.

For those of you old enough to remember it, I'd like you to take a small imaginary trip back to February 1974. Gough Whitlam was Prime Minister of Australia and Richard Nixon was US President. Skyhooks were a few months away from releasing *Living In The 70's*, but we weren't just singing about it, we were actually living in it... Carpet was brown, kitchen bench-tops were bright green or yellow and Australians consumed takeaway food and footy that were produced by local operations, not corporatised franchises. At the start of that same year, I was about to start my second year of secondary education at Meadowbank Boys High School in Sydney's inner-western suburbs. Like generations of spotty teenagers before and after, my enthusiastic, but severely underdeveloped handcraft skills had been inflicted upon a range of machines and tools in Meadowbank's wood and metal work rooms the previous year while I was in First Form (they changed the way classes were labelled in secondary school from First to Sixth Form to Year 7-12 at the start of 1976). While I may not have ended that first year of high school with any discernible improvement in my wood or metalwork skills, I had obviously decided that these were fields in which I was interested, because I started Second Form having signed up to do electives in both metalwork and woodwork. That was until I attended my first compulsory music class and met the captivating Mrs B during the first week of school in February 1974. I have no memory of what Mrs B was like as a teacher of music, but she must have had some potent quality that worked wonders on the adolescent male libido because I, along with about five or six other boys, immediately signed up for her elective Music class. This magic quality may well have been emphasised by the fact that I attended an all-male educational institution. However, by switching courses I had to drop either Metalwork or Woodwork and it was Metalwork that got the chop. So the sum total of my formal metalwork training consists of the six months of non-elective classes that most male school students received as a part of their compulsory education prior to selecting a couple of elective subjects to pursue at greater depth for the next two or three years. These days Woodwork and Metalwork sits within a suite of subjects called D&T (Design and Technology), and we ensure both girls and boys get an opportunity to inflict their developing skills on machines like lathes and drill presses, but the outcome isn't greatly different...

Now jump forward a couple of decades to approximately 2000. In the late 1990s I had begun a gradual process of transition between scales: I moved from HO, where a lot of what I needed was available ready-to-run (with a fair bit of work), to O, where almost nothing was available. After I made the change of scale the availability of r-t-r models in HO exploded in a way that I never would have imagined possible, but there was also a significant, although slightly less spectacular, development in the NSW O scale market. In 2000 there was very little available either r-t-r or in kit form, but over the intervening fifteen years the variety of items coming onto the market means things have reached a point where we're probably approaching a similar place to where the HO market was in the early 1990s. When I'd decided to change scales, one of the factors affecting my decision was that I was looking forward to scratchbuilding a portion of the rolling stock and locomotives I would need to build a layout. I didn't survey my new scale to ensure what I wanted was available commercially: I deliberately made the switch to

another scale because it lacked commercial support! [Next stop: S scale? – Editor] Given enough time and perseverance, I suppose I could build pretty much anything I wanted from scratch in my chosen scale, but the commercial side of the scale does influence what I build. While I want to scratchbuild models, I'm not so bloody minded that I would build something that was available commercially, either as a kit or r-t-r. The ideal situation for me is one where a portion of the models I might want to run on a layout are available as kits or r-t-r, but where I would get the opportunity to fill the gaps with prototypes that are never likely to come onto the market as commercially available models. [Murphy's Law dictates that as soon as you have completed your latest masterpiece, it will be announced as an r-t-r item! – Editor] This would be true for any scale I was working in, but the opportunities are greater in a minority scale such as O. While a number of personal and professional reasons have prevented me from actually following through on the plan to scratchbuild models in the intervening years, recently everything has started to change.

Move forward to 2010. We've all heard that men are supposed to go through a mid-life crisis in their 40s and this plays out by them purchasing a motor bike, a red MG or making a fool of themselves with a young woman. While I'm not sure I had a mid-life crisis, I did have a heart attack in 2007, so if suddenly being confronted with the reality that I wasn't going to live forever qualifies as a 'mid-life crisis' then this was probably the precursor to what came next. I've never wanted an MG in any colour, my aversion to motorbikes was made clear in a previous *In The Loop: Image Problem? What Image Problem?* AMRM Issue 314, October 2015) and I make enough of a fool of myself with my partner Louise already, without the need to go looking for further opportunities! It took a couple of years, but I think my health scare in 2007 finally prompted me to start working towards doing something in 2010 I had long wanted to do: scratchbuild some locomotives. Around this time I was contemplating the possibility of purchasing some serious metalworking machinery in the form of a mill and a bench-top lathe. The itch to acquire these pieces of machinery had been growing for quite some time and it had reached a point where I was actually looking at prices and comparing features of different machines. At roughly the same time, one of the locomotives I'd contemplated building was announced as a project by a manufacturer, so I found myself faced with a bit of a dilemma: should I buy the machinery and build my own locomotive or place an order for the r-t-r model. In the end I purchased the machines and placed an order for the locomotive. The total purchase price of these items – mill, lathe and locomotive – wouldn't have been enough to buy a Harley, but it might have got me a second hand Yamaha...

I've been working with styrene and wood as modelling media for many years and had occasionally made metal components, using hand tools, for the models I'd built, but I wanted to push beyond these comfortable boundaries in my move to scratchbuild locomotives, hence the purchase of the machines. I've seen some very fine locomotive and rolling stock models made from styrene over the years and if I'd decided to commence construction of a locomotive project in this material it wouldn't have required me to purchase expensive new machines, to say nothing of the myriad accessories needed to make them do just about anything other than the most basic operations. I'd also built a number of locomotives from kits that

were essentially 'mixed media': namely, they had both metal and plastic components and these turned out fine models that both ran well and looked the part. However, in spite of this fairly extensive and, on the whole, satisfactory experience of building locomotives in a range of materials, I wanted to build mine from metal; brass, steel, aluminium and nickel silver. The problem was that, because of the allurements of my music teacher all those years ago in Second Form, I had next to no experience in working with these materials at the level required and not much understanding of how to go about acquiring either the tools or the requisite skills. I knew what a lathe did, but I was far from convinced that understanding the basic concept would translate into parts for a locomotive project.

So where does the neophyte locomotive builder go for information on working in metal? Understandably, I went on a search for information in printed, digital and human form. Probably my most useful source of information was in the form of four books I purchased from the UK publisher Wild Swan by writers Guy Williams and Geoff Holt, which deal specifically with the construction of scale locomotives in metal. I also purchased a few issues of *Australian Model Engineering* to search out materials and tools. The focus of this magazine is on the larger, outdoor and live steam scales, but it can still be a very useful source of information. I was directed to one of the most unexpectedly useful sources of information by my friend Chris Harris. Chris is a fellow modeller who I discovered had also bought himself a small lathe and in an email he happened to mention that he'd been looking at mill and lathe machining videos on YouTube. Initially sceptical, I jumped online and found literally thousands of videos made by enthusiasts about what they were doing on their metal work machines. If you don't believe me, go onto YouTube and type in something like "machining brass" and you'll be amazed at what gems await you. There's also a wide range of chat groups available online which you can join and ask questions. There are usually any number of people on these groups who are more than willing to offer advice and help. Yahoo! groups are a good place to start. The final source of information is that provided by friends and fellow enthusiasts. Aside from Chris, I have a couple of other friends who offered advice and encouragement as I groped about looking for answers to some extremely basic questions. Sometimes it pays to simply ask among your own friends; you might be surprised at the knowledge they have. Of course this applies to all modelling topics in any scale, not just the scratchbuilding of locomotives.

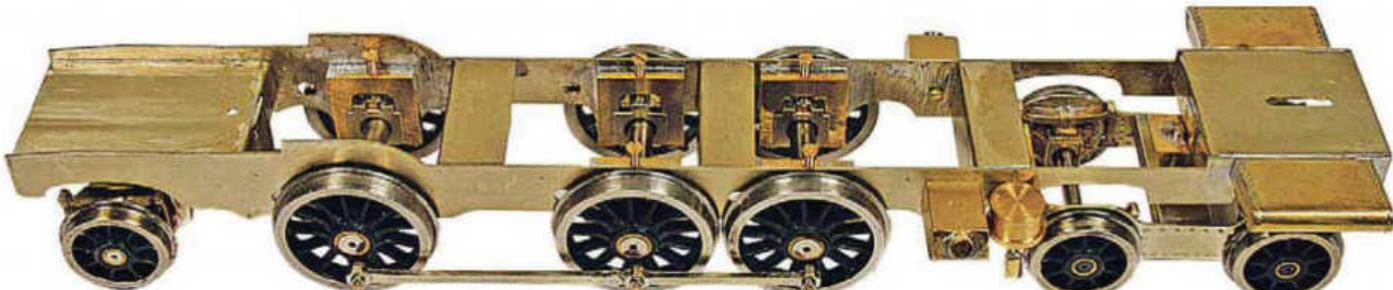
And so we arrive at the start of 2015 and I still hadn't actually commenced building a locomotive from scratch out of metal, or any other material, for that matter. I can't blame Mrs B for this inertia; her influence on my academic pathway was applied over forty years ago. So what was holding me up? It turns out that there are a couple of lessons here that I've had to learn many times over, each time I take up a project. The first lesson is that the shopping, researching and discussing with friends part of a project is easy and extremely enjoyable, but if you ever want to produce a model you have to actually pick up a tool and apply it to some modelling materials, whether they be plastic, wood or metal. Shopping, researching and discussion of a modelling project are not, and never will be, a replacement for actually modelling! A certain level of uncertainty, even fear, is

natural and completely understandable, but this shouldn't stop you from making a start. The second lesson is that before you can actually make anything you need a subject for your building project. Dozens of steam locomotives were operated by the NSWGR over many years: I could quite happily model almost half of them. But if I ever want to actually build one I need to select the subject of my endeavours and then apply lesson one.

One of the first 'modern' kits to come onto the market in O scale quite a few years ago was a Z19 class locomotive by Century Models, which is still available from ModelOKits. Some of these (prototype) locomotives were converted into tank locos during their long careers and came to be part of a group labelled the Z20 class. I've talked to quite a number of modellers over the years who have said to me that the Z19 kit would make a good starting point for building a Z20, but I'm yet to see one of these conversions in model form. After building a Z19 kit I came to the conclusion that, while there are some body components that could be used in building a Z20, a completely new chassis would have to be built from scratch. For me this was an advantage because it would force me to cut metal and build the chassis from scratch if I was going to complete the project. Another advantage of building a locomotive from this particular class was that they had inside motion. This meant that there were no complicated bits of motion hanging from the wheels in plain sight which I'd have to reproduce on the model. The 20 class possessed just one, simple, jointed, side rod and I already had an etched set of rods for this locomotive in my collection of parts, thus relieving me of the challenge of having to cut them out of sheet metal. The final factor in the decision to build this particular locomotive was that it ran on the Morpeth line up until the line closed in the early 1950s. I've been modelling the Morpeth line for the past 14 years and the one feature sorely lacking from my layouts throughout these years has been a Z20. All these factors made the final choice a relatively simple one.

I started building a NSWGR Z20 class 2-6-4 tank locomotive in late July 2015 and at the time of writing a running chassis has been produced and I'm quite close to moving on to building the body. While it helped that I'd been accumulating various parts - wheels, motors and sheet metal - to scratchbuild a Z20 for most of the fourteen years I've been modelling Morpeth, this wasn't quite enough to get me started. What finally kick-started the project was a public, online exchange I had with a modelling friend, Bruce Wood. I had made a posting online where I mentioned that I was dabbling in the very early stages of building a Z20 and Bruce asked why I was scratchbuilding a locomotive when we were all expecting a kit for the same loco would be released soon. I replied with something like 'I'm willing to bet I could scratchbuild a 20 faster than it would take for the kit to come out and for you to build it'. Much to my surprise he took me up on the challenge! What do the kids use online to express shock and surprise? OMG! The wager is a lunch at North Sydney Leagues Club, so if I planned to win I'd have to start building the thing! I'll let you know how I get on...

Postscript – At the end of 1974 Mrs B got a transfer and left Meadowbank Boys High School. Her replacement was a competent teacher, but he was a male and, in the absence of Mrs B, Music was never quite the same. I should have stuck with metalwork or perhaps insisted that my parents send me to a co-educational high school!



That long ago decision to choose women and song over toiling at the forge of Vulcan does not appear to have materially affected the author's metalworking skills, as can be seen from this image of his under construction O scale NSWGR 20 class 2-6-4 tank locomotive chassis.



The completed O (1:48) scale model of A²995.

SCRATCHBUILDING STEAM LOCOS

A Modicum of Springing

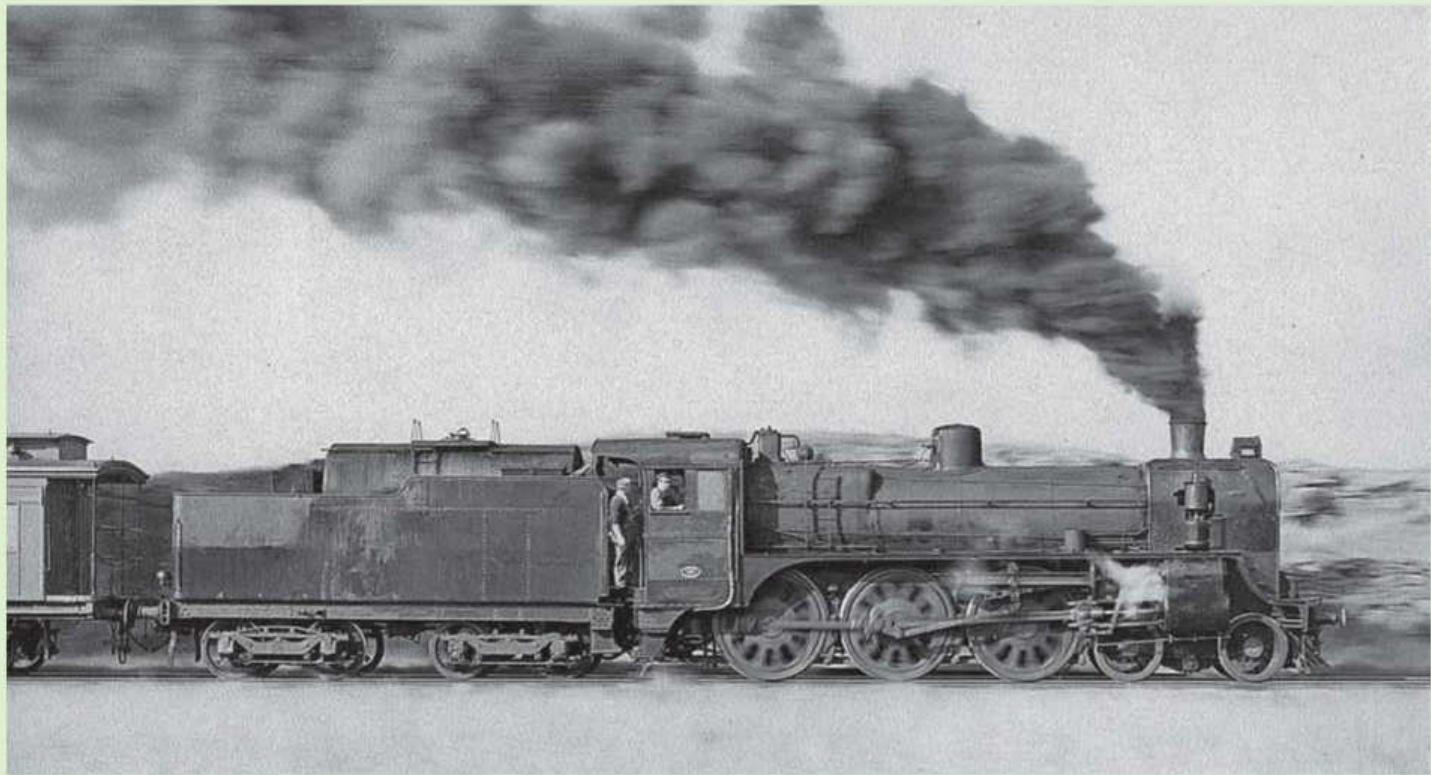
Roger Hill describes some of the useful tweaks he used when scratchbuilding his VR A². Photos by the author.

I model Victorian Railways prototypes in O scale (1:48) and the parts shown in the photos are of my scratchbuilt VR A² Class 4-6-0 express passenger loco-

motive, No.995, prior to painting and final assembly.

Between 1907 and 1922, 185 A² class locomotives were built at the Victorian

Railways workshops at Newport in Melbourne. Of this total, 125 had Stephenson valve gear and the last 60, built between 1915 and 1922, were fitted with



One of the inspirations for the model. The author's 1963 photograph of Boxpok-driven A²986 in 'full flight' on an ARE tour to Fyansford, shortly before the locomotive's withdrawal.

Walschaerts valve gear. Originally powered by saturated steam, they were all progressively fitted with larger, superheated boilers. They had a boiler pressure of 185psi (1275.5kpa) and developed a tractive effort of 27,480lb (122.2kN) with 6'1" (1.85m) driving wheels, and were permitted a maximum speed of 70mph (112km/h).

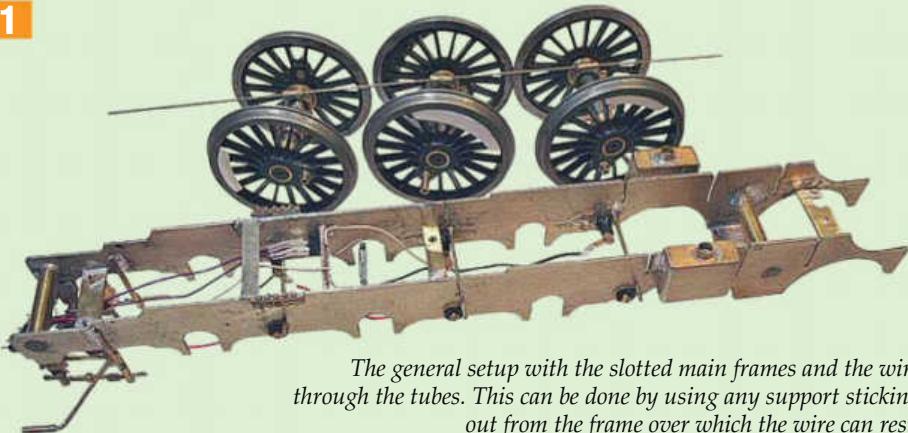
The model represents how they looked between 1926 and the mid-1930s, when they received modified front ends based on the work of Dr Wagner of Deutsche Reichsbahn, and E C Young of the University of Illinois. The modifications dramatically improved their power and performance. The softer exhaust required the fitting of smoke deflectors.

The last locomotive to be withdrawn in December 1963 was A²986, and it is pleasing that operational restoration is well under way by Steamrail Victoria in the old Victorian Railways workshops at Newport, where it was built. A²995 is preserved at the Australian Railways Historical Society's Museum at Williamstown, next to the Newport Workshops.

I use Slaters wheels, bearing bushes and plunger pickups. I don't like locking wheels and gearboxes up in frames, which means the frame bearing holes have to be slotted. This of course means a method of 'keeping' has to be employed.

When Frank Kelly and I were building O scale VR K class 2-8-0 steam locomotives in parallel, I noticed that Frank had soldered single chain links onto the Slaters bearing bush, to stop them rotating in the frame bearing hole by threading a wire through. My frame had slotted bearing holes to allow the wheels to drop out. One day, after noting what Frank had done, I had a brain wave in relation to keeping the wheels in place in the frame, with a modicum of springing thrown in at the same time! A flat is filed on the Slaters bearing bush and a piece of tubing is soldered on. A flexible wire is threaded through the tubes and over the Slaters pickups and there you have it, we have a keeper and some springing all in one!

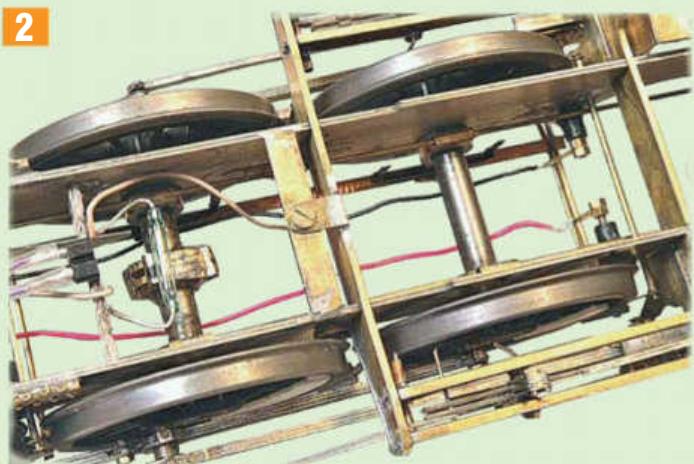
1



The general setup with the slotted main frames and the wire through the tubes. This can be done by using any support sticking out from the frame over which the wire can rest.

The wheels in place in the frame showing the tubes soldered onto the bearings, leaving space for the frame. Also visible is the EDM sound cam, which drives a Soundtraxx D&RGW K Class Tsunami decoder in the tender (chosen because it has the correct VR whistle – a US Nathan chime) and the plunger power pickups that bear on the back of the tyres.

2



The assembled chassis, showing that the ends of the keeper wires don't need to be fixed, they are threaded under a mainframe stretcher at either end of the loco. Careful design and construction of the frames and motion is essential; in this case the frames and motion gear were custom etched in nickel silver.

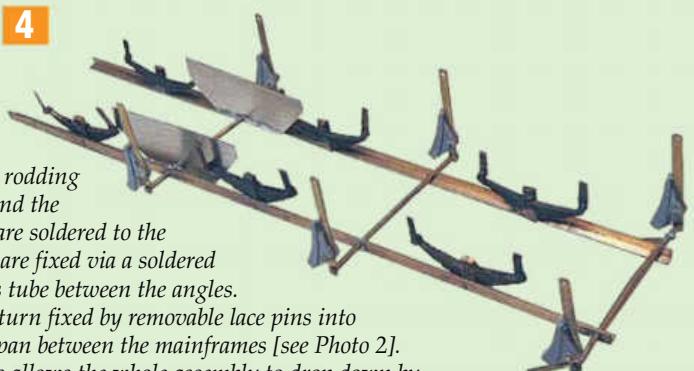
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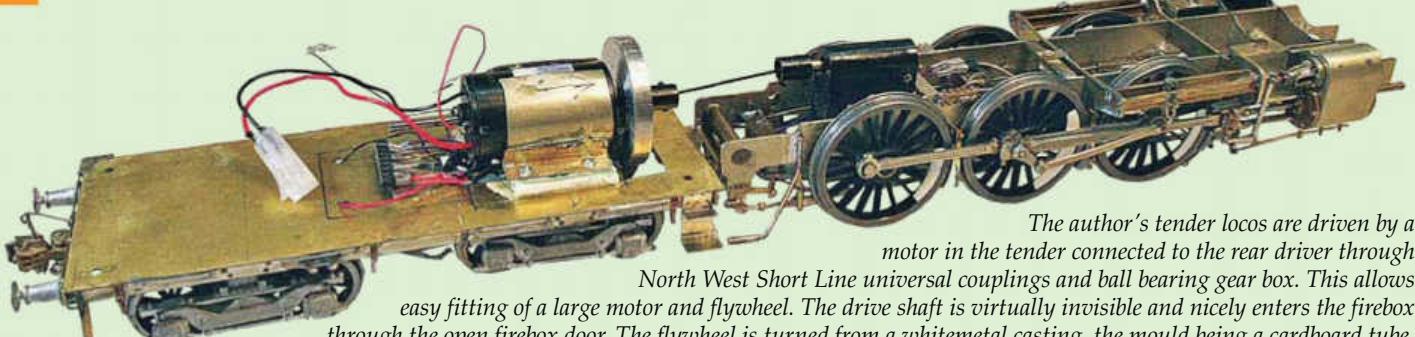
The loco springs and brake hangers have to be removable. The brass angles simulate the brake rodding running lengthways behind the wheels. The loco springs are soldered to the angle. The brake hangers are fixed via a soldered lace pin into a 1mm brass tube between the angles.

The brake hangers are in turn fixed by removable lace pins into 1mm brass tubes which span between the mainframes [see Photo 2]. Removing these pins thus allows the whole assembly to drop down by removing the six pins. The trapezoidal shape represents the ash pan sides.

4



5



The author's tender locos are driven by a motor in the tender connected to the rear driver through North West Short Line universal couplings and ball bearing gear box. This allows easy fitting of a large motor and flywheel. The drive shaft is virtually invisible and nicely enters the firebox through the open firebox door. The flywheel is turned from a whitemetal casting, the mould being a cardboard tube.

Overhead Wire?

Jonathan Majer asks if we really need to model the overhead wiring when modelling electrified areas.
Photos by the author.

1

▲ The overhead wiring is just about visible up to the second mast, but beyond that it fades beyond the resolution of the average eye.

Since the initial production of suburban electric trains by Bergs Hobbies and with additional models now being produced by Southern Rail Models, Auscision and others, there is an increasing interest in having layouts with overhead wiring, either for general effect or, more rarely, for additional electrical pickup.

I joined the ranks of such modellers over 25 years ago, when Bergs' produced its original single-deck suburban electric set. Masts and wires were promptly sourced from Sommerfeldt and other manufacturers and installed over the main line of my layout. The general appearance was most impressive, but there was one significant and onerous setback – cleaning the track with my Peco track rubber became extremely difficult in many of the hard-to-reach parts of the layout. When approaching the track, my arm tended to knock the mast and wires and my sleeves often became entangled in the wiring. The situation was greatly improved when the Woodland Scenics 'Tidy Track' cleaner became available, as the cleaning pads are mounted on a 30cm stick that can be inserted between the overhead wires towards the track. This was much better, although the presence of the masts and wires still presented difficulties on certain parts of the layout, making track cleaning a more onerous than usual experience.

Then one day while driving to work down the Mitchell Freeway in Perth, the solution struck me like a bolt from the overhead wires. The Perth to Joondalup line is built down the centre of the freeway, providing

an unobstructed view of the line and all of its overhead wiring. What dawned on me was that the wires could only be visible for the closest two masts; beyond that they fell beneath the resolution of my eyesight. So why is it necessary to model overhead wires in the background of the layout?

In considering this, we need to look at the spacing of masts on the prototype. There is no set distance, as the location depends on the geometry of the track and overhead wire tension length, as well as a number of other factors such as locations of neutral sections, bridges and other features and structures. However, typically the masts are spaced around 50-60m apart. Photo 1, showing a section of the Perth-Joondalup line, clearly demonstrates that the wires effectively become 'invisible' to the observer beyond the second mast. So, if you have a layout that is only visible to viewers from the front, unless the wires are used for overhead pickup they may not be a necessary feature of the layout.

Armed with this realisation, I brought out the wire cutters and soldering iron and removed wires from the rear and sides of my layout. Photo 2 demonstrates the result. An operator sits or stands about a metre back from the layout, in other words about 87m from the track. In this photo the camera was held about 900mm, or 78 HO scale metres, from the first mast. The second mast, which has no wiring, is a further scale 20m away and the third track, which is not wired, is 16m behind the front line. Apart from feeling an overwhelming sense of relief that I could now clean the track with ease, this made no appreciable difference to the visual impact of the overhead system. I was so impressed with this improvement that I installed masts in all the storage sidings, which are situated towards the rear of the layout.

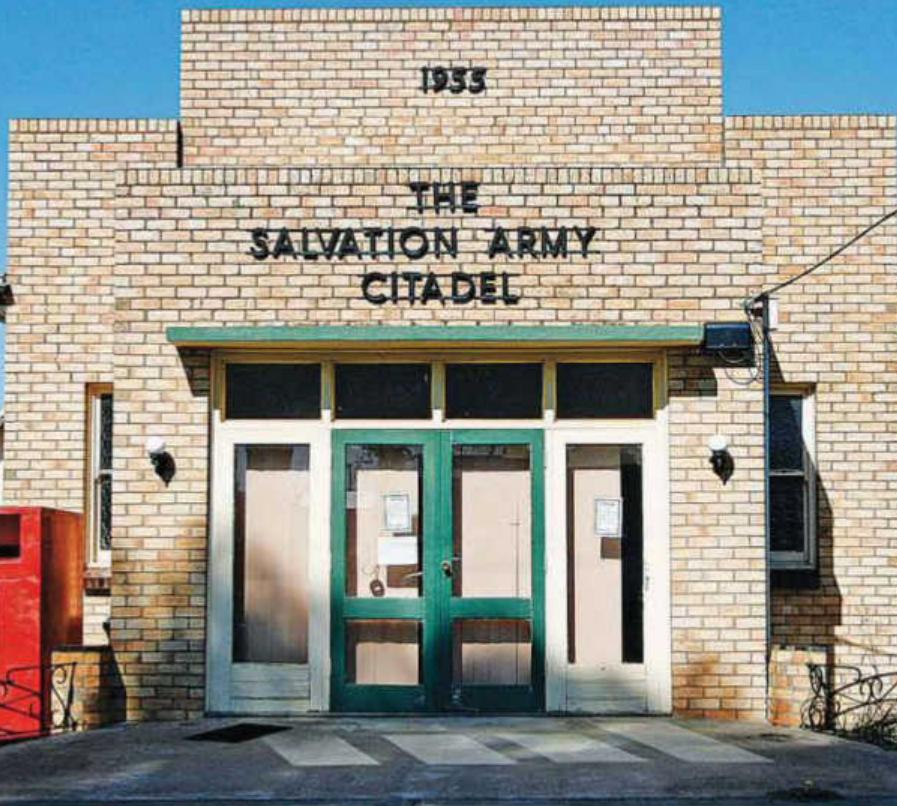
I realise that this idea may not suit some purists and would not be suitable for layouts with all-round viewing, but the increased enjoyment of a layout on which it is much easier to maintain clean track far outweighs the slight loss in realism.



▼ In single-deck interurban days, 'The Fish' arrives at the wired station on the author's HO scale layout. The wires are only present in the foreground; beyond about a scale 100m from the viewer there are no wires at all.



2



Kaniva

Maikha Ly has been photographing interesting buildings in country Victoria again.

Most layouts that model a country town setting have a couple of shops and houses, plus maybe a service station and perhaps a community hall, but there are many other building types to be found in country towns that can also make interesting and attractive models.

▲ Most country towns (and indeed, many city suburbs) have their Salvation Army citadel, usually a modest building that lends itself quite well to reproduction on a model. Kaniva's citadel is situated at 34 Progress St and can be viewed on Google maps via this link: <http://tinyurl.com/okflca3>

▼ Another building that can lend itself to the construction of an interesting model is a bus garage, also giving the opportunity to display some of the many bus models that are also available commercially. Kaniva has its own bus service, the depot for which is located at 33 Commercial St. Viewing it and the surrounding area on Google maps at: <http://tinyurl.com/pmusmjm> will reveal many interesting modelling opportunities.





**CONSTRUCTION
BRANCH**

Model an Abandoned Quarry Face

Ross Hurley outlines a useful technique for reproducing rock faces. Photos by the author.

I had a small gap to fill on our ABLO layout after some scenery reconfiguration [Photo 1]. Someone suggested a small quarry. The next weekend, I grabbed my camera and looked for similar-sized quarries in the nearby Adelaide Hills that I could use for inspiration. The southern Hills have many small, now disused, quarries which were in use up to the 1920s, including the Sleeps Hill quarries that supplied ballast to the SAR. I took a number of photos of small quarries in a similar setting. I was also interested in the colouring of the rocks, and found some good examples.

Modelling the rock faces didn't hold any terror for me, as I had picked up a technique from an early issue of *Model Railroader*

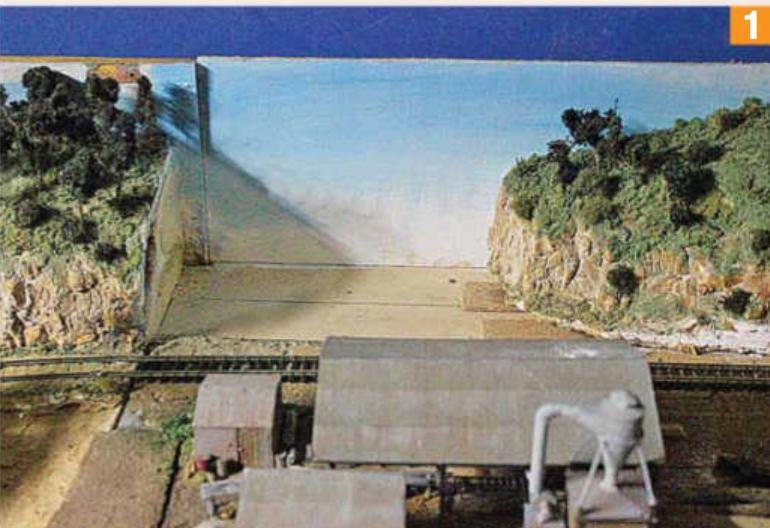
when I was a teenager. I've used it many times since. The beauty of the technique is that it doesn't require any special artistic skill.

Photo 2 shows one of the quarries in the Adelaide Hills. It shows nice strata, and the colouring of the rock faces is very attractive.

Photo 3 shows the basic landform of the model being made with crumpled newspaper held in place with masking tape. Scraps of styrofoam would do just as well.

Several layers of small pieces of plaster mat were then laid over the newspaper form.

Photo 4 shows the first stage of creating the rock face. A thick mixture of plaster is made up and, just as it starts to harden, it is splotched onto the plaster mat randomly with a knife. This is the key to making a realistic rock face; the random splotches form their own shape. While I had the plaster mixed up, I also put



▲ A gap in the scenery that needs filling after alterations to the layout.



▼ An abandoned quarry near Sleeps Hill, SA.



The basic shape of the quarry face is underpinned by crumpled newspaper held in place with masking tape. Plaster-impregnated mat is then laid over the top to give the final shape.

ABLO

ABLO, or Adelaide Branch Line Operators, is the name given to the collection of several groups of Adelaide modellers who hold regular operating sessions, using timetables based on 1960s/1970s SAR operations. Regular SAR services are replicated with authentic rolling stock and freight moves as determined by the random selection of cards, based on a popular American system. ABLO operations have been going a long time; they commenced on the layout this quarry was built on around 50 years ago. Various ABLO members' layouts have appeared numerous times in AMRM.



4

As the first step of creating a rock face, a thick mixture of almost-hard plaster is randomly splotched onto the plaster mat. Opportunity has also been taken to repair the break in the backscene with left over plaster mix.

some over the step in the backscene, above the rock face. That will be smoothed down later and painted a sky colour.

Stage 2, while the plaster is still somewhat floppy, quickly drag a knife across the face, forming the basic strata. You'll see in Photo 5 that I'm doing this at an angle, matching the strata in the prototype photos. Follow this up with some random stabs with a square-ended blade to form some of the vertical edges. This is a very 'broad brush' process. The strokes are done quickly and randomly – you're not trying to artistically 'carve' the rock face, just to enhance the basic shapes formed by the random application of the thick plaster.

The last stage is done when the plaster has almost set. With a sharpish blade, scribe in finer strata lines parallel to the basic lines drawn when the plaster was still wet, and chip away at the natural shapes created to sharpen the edges - like a real broken rock face [Photo 6]. You'll see the chips I've made with this process on the quarry floor. I then pour a soupy mixture onto the quarry floor, after which I spread the plaster chips over it to form the talus at the base of the rock face and as rubbish rock pieces on the floor.

Photo 7 shows the basic colour applied. I use students' acrylic tube paints from my local discount store, and I've mixed up a colour basically matching the colour in the prototype photos. On top of the basic coat I've dry-brushed a slightly darker tone to introduce some variation. How much more painting you do is up to you and how closely you want your rock face to look like the photos.

The header photo shows the finished quarry. I painted a dark



5

Dragging a knife across the still 'floppy' plaster to rough in the strata of the rock face.



6

Finer strata lines have been carved in with a sharper blade when the plaster is almost set. The plaster chips removed in this process are recovered and used to form the talus at the foot of the face, once the blending shown in the next photo is complete.

wash of a little straight burnt umber and Indian ink over the basic colour to settle into the crevices and give the colour some 'depth'. Lastly, I drybrushed a very light mix of the basic colour onto the rock high points. It represents an abandoned quarry, so there is no machinery or huts left; just broken rock on the quarry floor.



7

The rock face is painted with acrylic artist's paints to match the prototype photos. Various darker tones are dry-brushed to variegate the colour and a wash of a little burnt umber and Indian ink will be applied when everything is dry to give 'depth' to the rock face.

GALLERY

The VR in 0 Scale



Modelling the Victorian Railways in O ($\frac{1}{4}$ ") scale is thriving (thanks mostly to Veteran Models, it would seem!), as can be seen from these photos AMRM's Production Manager, James McInerney, took at a recent Victorian Prototype Modellers' Forum, as organised by the Victorian Model Railway Society. The 2015 event took place on Sunday, 8 November last.

These three passenger cars, ABL first/second composite, BW second-class carriage and C class passenger guard's van, were all constructed by Roger Hill from Veteran Models kits.



► Matt Winzenried had almost completed this Veteran Models kit of one of the VR's ubiquitous GY four-wheel open wagons.



► Ian Weickhardt displayed this under restoration model of a VR suburban parcels coach originally constructed by the late Geoff Lormer. The model started life as a CE van, but was converted during construction to a CM parcels coach. As it isn't quite right to represent either 4CM or 5CM (the only smooth-sided elliptical roofed cars), it will be numbered as 6CM, which would have been the next one in the series, had it been constructed, when completed. The power bogie was produced by the late Chalmers Watt and the model is powered from the overhead catenary, as per the prototype.

►▼ Andrew Maddicks displayed these items of VR goods rolling stock. The M cattle wagon and Z goods guard's van were constructed from Veteran Models kits, while the B van is an O-Aust kit detailed with additional brake rigging sourced from Veteran Models.



▼ Matt Winzenried also displayed this VR U four-wheeled louvred van, constructed from the Veteran Models kit.



▼ Fraser Brown flew the flag for scratchbuilding with this VR K class flat wagon constructed mostly from styrene. It was built in 'true-scale', as can be seen by the wheel profile of the wheels under the vehicle and the extra axle mounted as a load.



▲ Andrew Maddicks also constructed this VR 'high cab' T class Bo-Bo diesel locomotive from a Veteran Models kit, powering it with a modified Atlas SW8/9 mechanism.



▲ Roger Hill is also a master scratchbuilder, as can be seen from this model of the VR's classic A2 class 4-6-0 steam locomotive, modelled as it was between the first and second World Wars. The model was constructed using fabricated nickel silver parts and commercial castings and is mounted on Slater's wheels. It is powered by a motor in the tender, driving a NWSL gearbox mounted on the rear driving axle. It is controlled via a Tsunami DCC decoder with a D&RGW K class sound scheme, as this chip contains sounds very close to those one would expect to hear from a VR locomotive.



Victorian Railways L Class Electric Locomotive, r-t-r in HO scale by Auscision Models, PO Box 1791, Castle Hill 1765. Ph: 0425 866 442. Fax: (02) 9620 6695. Website: www.auscision-models.com.au. Price: \$295.00 (plus P&P).

Ordered from the Preston (UK) works of the English Electric Company, the 25 members of the VR's L class were specifically designed and tasked with traffic haulage on the newly electrified Gippsland Main Line, becoming synonymous with this line. However, they were also common on suburban goods workings around Melbourne. Commencing from the completion of the electrification of the Gippsland Main Line from Dandenong to Yallourn and Traralgon in 1956, the L class hauled a wide range of consists from long trains of brown coal to Melbourne and Newport, to fast passenger services and all manner of workings in between, working in multiple on heavier loadings. Testament to their being fit for purpose is that very few significant alterations were made over their 30+ year life, the primary external changes being: addition of number boxes on the nose, changes of livery, covering the staff exchanger inset, and the late fitting of single arm pantographs (sometimes a

loco would carry one of each). Locomotive L1171 received a rebuilt nose to a lower profile in the late 1970s, a change not applied to any other class member. A very handsome locomotive, the VR blue and gold livery was eminently suited to the streamlined lines of the L class and arguably, the later orange and grey livery looked better than may have been expected. With the decline of coal traffic during the 1980s, the class was gradually laid up with most members retired and scrapped by late 1988. Several have been preserved at the ARHS Museum in Newport, Victoria.

Auscision has released five different livery variations for the L class (VR blue and gold, Vicrail 'Teacup' orange and silver, plus V/Line all orange and two variations of the orange and grey scheme), as well as two body variations (with/without the staff exchanger inset plated over). The models represent the L class from the late 1950s onwards, ie. with the illuminated number boxes on the nose.

The model comes very soundly packed in Auscision's standard firm card box with foam liner within which sits a plastic cradle that snugly holds the model and is held tight by a further plastic wrapper. The body of the model is formed in

strong ABS plastic with handrails and brake piping in metal and plastic, and plastic is also used to model the detail in the pantograph bay. As is now common, metal etched windscreen wipers are fitted and, on later period models, etched mirrors. The model scales out well against all major dimensions and most importantly (for the reviewer) the model looks like an L class. Noteworthy is a first class representation of the characteristic high nose with its multiple angles, the headlight housing and taper is excellent as is the subtle tapering at ends and curve of the sides towards the pantograph bay. While the vents on the body side and nose are moulded rather than having inlays, on the prototype both venting areas had fine vanes and, as such, do not look out of place, rather they help maintain the smooth body side impression that was so much a feature of the L. The sand-filling inlets on the sides appear slightly shallow, presumably to retain their depth within the depth of body ABS; a dash of thinned black paint will help make them look more convincing. Both of these matters are minor and do not detract from the model. The cow catcher modelled is the original

'pointy' type. Review of the model alongside pictures of the class in service shows Auscision have treated the L to their usual high specification with all major and minor details covered and little to do save weathering for even a fastidious modeller. Particular detail standouts for this reviewer were the crisp rooftop detail, well-formed MU connection housings, flush glazing and very fine nameplates. The cab detail includes two crew members at one end. Scale metal couplers are fitted and I had no problems coupling them with Kadees of various sizes.

The livery is applied in a smooth very low sheen with the gold sections having a more matt finish. Livery detailing matches Auscision's well-deserved reputation in this area, with very crisp edging and no sign of bleed through any transition. As with the prototype, the VR blue and gold very well suits this model and it looks stunning straight from the box.

Two sprung metal pantographs (non-working) are fitted and are a good representation of the original English Electric double pan type. The pantographs do not raise to the full possible height of the prototype,



however this is presumably to reduce upward pressure on model catenary, a sensible decision given modelling catenary (where modelled!) is often lower than prototype. I have relatively low catenary and as such removed one of the springs to make the pantograph more supple and to aid tracking.

To the workings and chassis, the bogie detail and depth is well done, conveying the look of these unusual (for the VR) bogies well. Speedo cord and sanders close to in-line with wheel treads are nice touches. The model picks up and drives from all wheels, and these are blackened metal discs to standard RP25-110, able to operate on rail down to code 70, with an 18" (457mm) minimum radius recommended. As is now standard, operating LED head and marker lights are fitted with small switches located below the model enabling them to be turned on and off if desired. The model is driven by a five-pole skew wound motor and is equipped with twin brass flywheels. The heavy diecast chassis contributes much to the model's weight which is very good for its size. The model is able to run in DC straight from the box and is DCC ready with a 21-pin socket fitted for those wanting to add it. It is also sound-ready with speaker enclosures moulded in to the chassis. As I only operate DC, I am not able to comment on the ease of fitting a DCC chip, though this locomotive (and most of the rest of Auscision's recent locomotives) appears to be a simple matter of slipping the body off, unplugging the 'blanker' unit, plugging in a chip, replacing the body, programming the locomotive number and driving off!

The model performed excellently straight from the box with immediate smooth starting and slow speed operation. Higher speed saw an increase in motor noise, but not material enough to bother the reviewer. The locomotive was tested on my layout with 3' (914mm) curves and maximum 1 in 50 gradient. A loading of 41 wagons (31 four-wheelers, 10 bogies), including three brass wagons, were used. The model had no problem starting this loading at slow speed with no slipping evident. Similarly the model had no trouble managing this loading around the layout and through multiple and connected/reversing medium radius turnouts (Peco). Standing starts were tested with no slipping evident including on grade. I have no doubt I could have added many wagons before any slipping would have occurred, the weight of loco ensuring good traction. This kind of operation without any running-in is a credit to the manufacturers in China and Auscision for their original specifications and pre-production testing. While lateral travel is allowed within the bogie, there does not appear to be any vertical springing. The L had a longer bogie wheelbase than was common on the VR and this led to some derailment on some of my less smooth sections of track (a 'wake-up' call to be more careful with my tracklaying than a criticism of the locomotive) – properly laid track with smooth transitions and mild level-incline transitions would pose no issues.

With minimal VR electric modelling and fewer electric layouts, Auscision have taken a risk producing this iconic VR locomotive. The risk is partly offset by the L class's popularity and status amongst the VR's 20th century motive power and doubtless many may be purchased for display and/or running under imaginary wires. Certainly this is a model that looks sensational and will grace any layout (or shelf!); a first class model by any standard, of a handsome prototype with excellent running qualities that I wholly recommend to anyone with an interest in the VR, whether you have wires or not!

Andrew Collier

My Railway Days by John Dare. Self-published by John Dare, PO Box 3043, Syndal 3149. Website: www.myrailwaydays.com.au. Price: \$75.00 (plus \$18.00 post and packing).

At first glance, John Dare's *My Railway Days* appears to be a beautifully presented collection of photographs of the Victorian Railways. On reading the book from cover to cover for this review, it has to be stated that this is truly a wonderful historical record of the last 37 years of government ownership of the railway system.

What makes this book stand out from other publications is the fact that the photographer and author is John Dare – one of Victoria's finest railway photographers who also, as a professional railwayman, was quite conveniently working as a senior employee in the timetables section at head office. In many instances, armed with first-hand information of train running details from timetables he had authorised or direct information from Train Controllers, which permitted John to exploit this wonderful advantage in recording the rapid changes that were taking place throughout suburban and country Victoria.

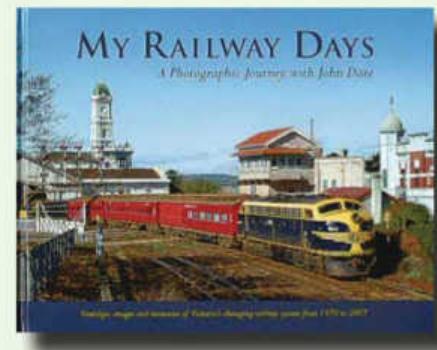
When John's authoritative text and captions are combined with his selection of colour and black and white photographs over the 24 hour operating cycle, we have a seriously well thought-out publication.

John Dare began his 38 year railway career in 1971, hence the timeframe and title for this book. Reading through the pages you will find mainline, branchline, suburban area, named trains, freight and special train workings. The coverage extends to stations, infrastructure, night shift, loco depots, foreign loco power, preservation, railway people and the new era of changes. Each section contains a short introductory text providing a valuable insight into its subject. Many captions contain additional information reflecting on the author's personal experiences in obtaining 'the shot'. John's reputation as a photographer has been well earned through his skilful choice of locations, creativity and a willingness to share his work through the railfan press in Victoria over many decades.

To add significantly to this historical record, a 'Chronology in Time' section is featured, providing a detailed account of significant events for each of the years from 1970 to 1999.

My Railway Days is a hard-cover book, 300mm x 230mm with 160 pages of quality paper to bring out the best of the superb images. Interspersed throughout the book are images of railway memorabilia, such as tickets, advertising and parcel stamps – all poignant reminders of the changes that were also taking place beyond the rails and rolling stock.

The front and back end papers include signalling diagrams of Flinders Street in 1978 and the Port Melbourne line, the first railway opened in the state of Victoria, converted in 1987 to standard gauge and integrated into the Melbourne tram network. A novel and generous bonus is an envelope fixed to the second-last page containing a removable



map, showing the Victorian railway system in 1970. On the reverse side, the same map, but showing what was left of the system in 2000.

Victorian railway modellers, particularly those who may be too young to remember the last days of the government railway system, will find this a valuable reference in relation to the extensive range of ready-to-run rolling stock from this era being produced by manufacturers, as well as seeing the missing infrastructure that gave the system its character.

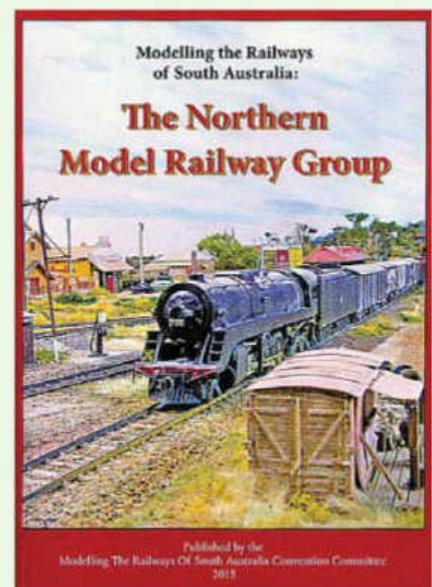
As stated earlier, this is more than another picture book. It is highly recommended for its content and quality as a graphic reference to a period in Victoria's railway transport history that is fondly remembered, but sadly no longer in existence.

The book is available directly from the author, via the website mentioned in the heading, as well as from various railway book retail outlets.

Bruce McLean

The Northern Model Railway Group, published by the Modelling the Railways of SA Convention Committee, PO Box 356, Parkholme 5043. Available from hobby shops in Adelaide and from the ARHS bookshop, Sydney (web site: www.arhsnsw.com.au). Price: \$40.00.

This misleadingly titled book claims to be "the history of the dedicated group of model railway enthusiasts that make up the Northern Model Railway Group". It is no such thing, fortunately. It is, in fact, a collection of presentations made by members of that



group to the *Modelling the Railways of South Australia* conventions over the past two decades. As such, it highlights the group members' expert knowledge of many aspects of the old SAR and also the high standard of modelling a number of members, individually and collectively, have achieved. There are short introductory chapters introducing the group and the layouts with which they have been involved, and there are fourteen papers which have been presented over the years at MRSAs conventions. These papers cover a variety of prototype topics, such as SAR Operation, the Snowtown to Port Pirie Railway, Shunting of Private Sidings by the SAR and the Trucks Office. Modelling is covered by articles on the Converted 44' and 46' Lavatory Cars, Turntables, Mills, the Oil

Industry and Day Shift at Mt Gambier and other matters.

At 246 pages, the book is substantial, printed on heavy, quality paper with card covers. What distinguishes the entire opus is the quality and quantity of illustration, both model and prototype. Reproduction is universally excellent and provides a wealth of information on modelling the old SAR and how it can be done.

This book is essential source material for anyone contemplating modelling the SAR and an inspiration for any modeller of any railway scene. It also, of course, provides an excellent sampler of the monumental notes from the MRSAs conventions, which are now available on two DVDs from the MRSAs Committee.

Ian Dunn

REVIEWS

The products covered in the Review pages have been supplied or made available by the manufacturer, producer, importer or retailer listed in each product heading. AMRM welcomes access to new product lines for inclusion in the Review pages and requests items be addressed to the Editor at Australian Model Railway Magazine, PO Box 345, Matraville 2036. Readers are reminded that the prices quoted in the reviews are those applicable at the time of going to press. Those using the prices as a guide to purchasing products by mail order should always add extra for postage, or contact the supplier for the additional cost for mail order.

Editor

Victorian Railways FX Flour Hopper, r-t-r in HO scale by SDS Models, PO Box 804, Winston Hills 2153. Website: www.sdsmodels.com.au. Prices: \$198.00 (three-pack); some available in single packs: \$69.00 each.

The prototype history of the VR FX/VPFX pneumatic discharge flour wagon was covered in Peter Ennis's review of the Southern Models offering, beginning on p.44 of AMRM Issue 313 (August 2015).

Suffice to say here that there were two varieties of these highly distinctive wagons: FX1-6, and FX7-17. The earlier wagons were modified to conform with the later batch, in the matter of discharge arrangements and handbrake, by 1978. Many of these wagons carried advertising for flour millers and distributors, making for colourful decoration variations.

SDS have brought out both versions, in 'as-built', 1970s and later variants. See their website for the options which are available. The model is highly detailed, with major components in finely detailed ABS plastic and a plethora of details in POM, metal wire and etched brass. Bogies are made from free running POM, with blackened metal-tyred wheels, and Kadee No.148 couplings are fitted.

All measurements match the prototype very closely, including the 13'11" overall height. The overall width may be 3/4" narrow! Wheel diameter (3'0") and bogie wheelbase (5'11") are correct for a broad-gauge vehicle; for some odd reason, standard-gauge bogies had a 5'9" wheelbase. All relevant detail, and there is a lot of it, is well represented. Painting is smooth and opaque and the pad printing is exemplary, the tiny writing on the various signs clearly legible under a magnifying glass. There is no lettering on the bogies since, as they are made of POM, paint will not adhere. The characteristic VR white square, indicating the handbrake side of the



vehicle, is present. As built, FX1-6, at least, had black bogies and black pipework underneath, but later photos show overall silver pipework and the usual VR red bogies. The different styles of handbrake are fitted for the correct period, and the discharge pipes are likewise of the correct number for period.

There are no criticisms which can reasonably be made, as these are some of the most detailed models I have seen and are a credit to the designers and manufacturers.

Ian Dunn

Dimensions	Prototype	Model
Length Over End Sills	51'6"	51'6"
Bogie Centres	40'0"	40'0"
Distance between Hoppers	9'10"	9'10"
Bogie Wheelbase	5'11"	5'11"
Height	13'11"	13'11"
Width	9'8½"	9'7¾"
Mass		70g



NSW 86 class electric locomotive, ready-to-run in HO scale by Auscision Models, PO Box 1791, Castle Hill 1765. Website: www.auscisionmodels.com.au. Price: \$295.

When AMRM's Production Manager asked me to review the Auscision 86 class model, I warned him I had already opined to all and sundry that I thought it was the model of the year and therefore there could be a lack of impartiality in my appraisal. He gave me a cold stare (common for him) and told me to get on with it. Firstly, some background on the prototype. The fifty members of the 86 class electric locomotives were introduced by the then State Rail Authority of NSW from 1983. They were obtained to bolster their existing electric loco fleet of forty 46 class and ten 85 class for the impending amplification of the electrified network from Wyong to Newcastle and from Waterfall to Port Kembla. Built by Commonwealth Engineering, Granville, their specification was not 'modern' by international standards, with somewhat obsolete Mitsubishi

camshaft control equipment specified by the conservative SRA boffins. The 86 class was essentially a modernised, more powerful 85 class (also built by Comeng), with which they were designed to be compatible in multiple-unit operation. They were introduced in the then new 'candy' colour scheme devised by artist Phil Belbin. For the 1988 Bicentenary of European settlement, 8604 and 8619 were painted in a special 'Bicentennial' livery, along with several diesel locos. Later, Freight Rail blue became the standard livery, initially in a so-called 'stealth' version on 8601 and 8602. There was a further minor adjustment to the blue livery when Freight Rail became Freightcorp. When the entire class was withdrawn from service in 2002, most units were initially purchased by Silverton Rail and stored at Broken Hill, with a small Silverton logo replacing the Freightcorp logo below the cab side window. All of these variations have been accurately represented by Auscision, with a choice of several road numbers and excellent

colour application, some of which have already sold out. The only version of the 86 class the company has not modelled is the 'experimental' tri-Bo, 8650.

All detail on these models is of the highest standard, with performance to match from the five-pole skew wound motor. They are nicely weighted, with all-wheel pick-up and drive and it will take a mighty load to stymie their progress. The model is DCC-ready with a 21-pin socket. Models of this standard, as expected, have realistic marker light orientation according to direction of travel, LED headlights, illuminated number boards, and sprung pantographs. A crew is fitted at one end. All dimensions – length, height, width – measure out accurately. Below the body, the bogies are crisply detailed with piping and brake gear, and all other under-body componentry looks the part. Kadee-compatible couplers are fitted.

When Pacific National took over freight operations in NSW, the private company deemed the swapping of motive power, electric to diesel where the wires ended, to

be inefficient and thus the era of electric locos ended in September 2002. Those who lament their passing can now re-create the sight of an 86 class effortlessly whipping a *Newcastle Flyer* along, or a pair on an *Indian Pacific*, *Brisbane Limited* or interstate freight, or a quad slowly traversing Illawarra or Blue Mountains gradients with a full coal load. And not to forget tour duty, for a small number have been retained by enthusiast groups. One memorable tour was to Newcastle with a lengthy lash-up of non-airconditioned cars to inspect work-in-progress on the restoration of 3801 at the State Dockyard in 1984. 8620 was fairly new at the time and the driver certainly gave the steam buffs a demonstration of 86 class acceleration and speed during the run, getting away like a scalded cat along the straight northwards towards Rhodes after gingerly negotiating the curve from Strathfield.

Yes, Auscision have a 'motor' for you, having truly 'captured' the 86 class in miniature!

Chris Sim



A completed 50' VR goods shed, constructed from the base 30' shed kit, plus one extension kit.



VR 30' Goods Shed (kit 1031-H) and Goods Shed Extension (kit 1031A-H) in HO scale by Mount Blue Model Co, PO Box 460, White Horse Beach, Maine MA 02381, USA. Website: www.mountbluemodelco.com. Prices: 1031-H US\$65.00 (approx. AUD\$91.00) and 1031A-H US\$30.00 (approx. AUD\$42.00).

The basic kit builds into a two-door VR goods shed and the extension kit allows plenty of scope for building the larger four- and six-door goods sheds found in Victoria.

The parts are grouped and packaged in separate plastic bags, with the goods shed inside a cardboard box and the extension kit in a plastic bag with card header.

The goods shed kit instructions consist of four A4-sized pages, with construction text/photos and

three 'Parts Diagrams' pages for identification of various parts. The shed extension kit instructions consist of a further five A4-sized pages of construction text/photos and two 'Parts Diagrams' pages.

I built a 50' goods shed using both kits and the 1933 cast stump option.

I started by checking the larger parts and found that the laser-cut sections fitted, with all tabs and slots matching as expected.

The shed extension kit is the main source of assembly information, but both sets of instructions need to be referred to at various times in the assembly. You need to be very familiar with all steps to ensure that you do not make it impossible to get the parts to fit in the right place. For example, the sides and ends fit

together but have tabs to glue into the platform decking and the roofing sheets. Dry fit all assemblies before gluing.

Where possible, I marked the back of the parts with the identification letter and number. Where this was not possible the sheets were placed in labelled snap-lock bags. There are a lot of parts in the combined kits, so only remove the smaller parts as they are required.

My normal approach with buildings is to start from the bottom, so I started assembly with the shed floor and cast concrete stumps (Addendum step 15). The slots in the stumps were slightly tight, but a couple of passes with an emery board was enough to allow for the parts to fit together.

I wanted to evaluate the



Above: The goods shed extension kit parts laid out.

Left: The parts of the 30' goods shed kit.

alternative stumps, so a platform extension was made from the taller platform stumps using the 30' goods shed sub-floor K and Northeastern siding from my scrap box. The tall stumps (from sheet G) have a problem, in that the grain of the wood runs across the stumps making them very fragile. I was only building a half-width platform extension, so I had some spare parts. A coating of PVA on the stumps made them strong enough to allow them to be glued into the sub floor.

When I joined my platform extension to the kit platform, I found that the two sections were at different heights. A couple of pieces of scrap surround from the kit were added under the platform extension to build it up to the same height as the main floor. (An email to Mount Blue brought a very prompt reply, which stated that the wooden stumps were based on the relevant VR drawing, whereas the concrete stumps had been adjusted to make the platform line up with the floor of a U van sitting on code 83 track.) Both the goods shed and the track were laid directly on the layout surface.

If you have not built a wooden craftsman kit before, I would not recommend starting with this goods shed. Start with the White Horse Hotel (reviewed in AMRM Issue 314, October 2015), or a similar, simpler, kit. However, for everyone else, patience and time will result in another great building for your layout.

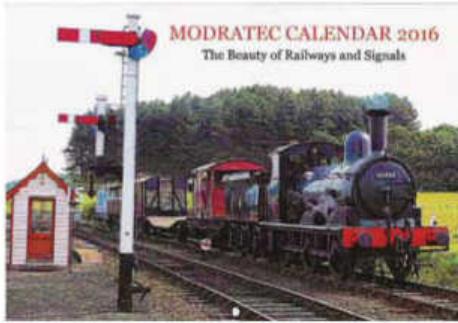
These kits were, at the time of preparing this review, only available direct from the company's website, though they will probably be available in Australia from the usual Mount Blue Model Co. stockists in due course.

Phil Jeffery

RECENT RELEASES



Southern Rail have released the first examples of their version of the WA L class locomotives, r-t-r in HO scale. First to arrive, in time for the Liverpool exhibition, were the red and yellow ATN Access and orange and blue Westrail (including the 'radio equipped' locos that ran in Victoria) locomotives. The PN blue and gold, Intercity blue, orange and yellow and the limited edition Westrail experimental colour scheme were (at the time of writing) expected at the end of October, with the original WAGR two-tone blue and ARG orange locos expected around the time this issue appears. There is also a very limited run of L class available in Southern Rail's own (non-prototypical) black, orange and silver colour scheme. The models are all available with a factory-fitted sound-DCC option (the sound version of the experimental Westrail colour scheme has already sold out).



Modratec have released their 2016 calendar, featuring monthly photos on the theme of signalling, with illustrations encompassing British, Australian and European prototypes, in both full-sized and model iterations. This A4 landscape format calendar is available direct from Modratec.

Auscision, released its previously announced NSW XPT train packs and also released previously unannounced colour schemes for the XP power cars: XP2000 in the colour scheme it carried for the 2000 Sydney Olympics (illustrated), XP2001 in the SRA of NSW/CountryLink



'Centenary of Federation' colours and XP2013 in the RailCorp/CountryLink 'Starlight Children's Foundation' scheme. Also available in single power car packs are XP2009 in the SRA/CountryLink Tilt Train/140 Years of Rail colours, XP2000 (again) in RailCorp/CountryLink in the '150 Years NSW Railways 1855-2005' promotional scheme and XP2001 in other special colours, the RailCorp/CountryLink 'Naidoc 50 Years' promotional colours. Along with the three full train packs in the three main colour schemes carried by these trains since their introduction in the early 1980s, there are three 'add on' two-car packs of extra passenger carriages.



Keiran Ryan Models have released an etched nickel silver and whitemetal kit in HO scale for a NSWGR 29' lattice post signal. No instructions are provided with the kit, as they are being written via an interactive blog (nswholatlatticepostsignalkit.blogspot.com.au) on the Internet!



Berg's Hobbies have received new models in the Minitrains range of HOn2½ narrow gauge models, including the 0-8-0 Brigadelok steam locomotive and passenger car illustrated, both of which would not look out of place on an Australian-style light railway.



Ezi Kits have released an HO scale whitemetal and brass kit for the NSWGR B55 class loco 2-6-0 in their 'early days' range of 19th century NSW steam locomotives.



Austrains released their second run of NSW FS/BS main line steel passenger cars. The two-car packs are available in post-1954 lined Indian red and 1980s era 'candy' colours and feature improved bogies.



Haskell Co. released the full range of their version of the WA L class Co-Co- diesel locomotives, r-t-r in HO scale, in late September 2015. Available are locomotives painted in the original two-tone blue WAGR, ARG yellow, plus Westrail orange and blue and the experimental blue, white, orange colour scheme applied to L268.



Model Train Buildings have added a number of kits to their laser-etched timber range of railway buildings. Illustrated are manufacturer-completed samples of NSWGR A8 island platform building, J3 station master's house, standard barracks building (based on Tenterfield) and a VR 30' goods shed, all in HO scale. Also recently released, but not illustrated, are sheep and cattle yards in both HO and N scales, plus, in HO scale, an NSWGR A3, skillion-roofed, timber-built, station building, two five-stall (extendable) roundhouses of both NSW and VR prototypes, as well as a low-relief Railway Hotel and, in O scale, the Tenterfield goods shed. An N scale model of Tenterfield station building is expected to be released in November.

Trainbuilder have released a new run of their ready-to-place, HO scale, VR, 'somersault' semaphore signals. Now available are single-post home and distant signals, plus two bracket home signals, one with an offset subsidiary post (illustrated) and the other with the mast in the middle and both posts offset.



Peter Boorman's Workshop

has released a HO scale kit for a four-wheel NSWGR HBW ballast hopper. Two versions of the kit are available, one with timber brackets holding the hopper in place (illustrated), the other with steel brackets. The urethane and brass kit, complete with wheels and decals, is sold as a three-pack and comes with provision of a drawhook and/or a pad to accept a Kadee coupler.



Marbelup Models have released a 3D-printed HO scale kit for the WAGR/Westrail WBC standard-gauge brake van. The prototype entered service in 1966 and was in regular use until around 1986. The correct style, 3D-printed bogies are available separately.



Model 'N More have released an HO scale etched-timber kit for a typical modernised, Victorian-era, two-storyed house, marketed as 'Eli's House'. Also released in HO scale, but not illustrated, are laser-etched kits for the VR's Chiltern goods shed and station building, 'Topaz', a QR-style station building based on Emerald (Qld), a three-bay roundhouse based on Valley Heights and a pre-cast concrete barracks, based on the example at Bomaderry.



Road and Rail Resin have released HO scale kits for a number of variations of the containerised milk tanks used in NSW during the 1970s and 1980s. Also available are replacement ends for NOGX wagons, a common sight from the 1980s as the original 'dreadnought' pressed ends wore out and required replacement.





Strath Hobbies have released an extensive range of kits of South Australian and Commonwealth Railways narrow-gauge prototypes in Sn½. Shown here are completed manufacturer's samples of their 830 class diesel and brake van GB4899. See main News text for more details of the range.



Veteran Models have released O (¼") scale kits for two Victorian Railways departmental vehicles, the welded NN bogie ballast hopper and a W workmen's sleeper that was converted from an AB class six wheel carriage.



AMRM NEWS

SDS Acquires Austrains Tooling

SDS Models have announced that they have purchased all the tooling assets of Austrains Pty Ltd. This agreement only involves the tooling; the name *Austrains* and the current stock remain with John Eassie.

Steven Pracy, the principal of SDS Models, has made the following statement: "John Eassie, of *Austrains*, has been looking to retire for several months now and we have been looking to buy his tooling for a similar period. Last month we concluded the negotiations."

We wish to thank John for the opportunity and to wish him well in semi-retirement. As he still holds a quantity of *Austrains* stock, he'll remain a familiar face on the exhibition scene for some time.

We'd also like to thank John for his graciousness in allowing us to redevelop some of his older lines during negotiations. We plan to have these re-issued and, in some circumstances, redeveloped, models available from mid-2016.

Please monitor the SDS Models website for further news as it happens."

Merry Christmas and a Happy New Year!

Every year it seems quite strange to be (thanks to our deadlines and print dates) writing Christmas greetings in late October, but, none-the-less, all of us here at

AMRM wish all our readers and advertisers a very merry Christmas and an even better new year. May your Christmas stockings be full of models you actually want!

Sad Losses

We have been informed of a number of deaths recently of people connected to the hobby.

Our condolences go out to Joe and Therese Calipari of Casula Hobbies on the recent loss of Therese's mother.

An unexpected loss was sometime AMRM author David Baillie, whose most recent article *Keep the Noise Down In There!* appeared in AMRM Issue 313 (August 2015).

A great loss to both the model railway and prototype research field was Queensland identity, Jim Fainges.

Likewise, the South Australian scene is the poorer for the passing of Doug Colquhoun, a man who contributed much to the recording of railway history with his photography.

Our thoughts and condolences to the families and friends of all these fine people.

New Products

HO Scale

Auscision have announced their intention to produce an r-t-r version of the NSW 442 class diesel locomotive. The first factory samples are expected early in 2016, with the production run due later in 2016.

Other Side Of the tracks



Bob Stack

Brought out from Ireland by the local council to increase the work rate, Pat O'Scale was a well known standover man

As is usual with Auscision, the range produced will cover the majority of the history of the class, reflecting the colour scheme and body detail changes that have occurred with these locomotives during their service history in both government and private ownership.

A re-run of the NSW 422 class diesel is planned for 2016. There will be new numbers for the existing colour schemes, plus body variations for the modern-era versions of the class, including the 22 class. Factory installed DCC sound will be available as an option on the re-run.

The range of CTC signals will expand to include home signals with working route indicators in mid-2016.

At the time this item was prepared, the NSW 43 class diesel locomotive range was expected to arrive in late October and should be

available by the time you read this. The NSW NDLF newsprint vans, plus the Victorian X and T (produced under the BRM label) locomotives were due in December 2015.

The first tooling samples of the NSW V set double-deck interurban/intercity EMU cars arrived in time for display at the AMRA (NSW) Liverpool exhibition (see photo elsewhere in this section) with factory-painted samples of these cars (and the NSW Sydney suburban Tangara EMU cars) expected early in the new year and the production run scheduled for the second quarter of 2016. Also on display at the Liverpool exhibition were factory painted samples of the NSW NODY bogie open wagon and JLX bogie louvred vans (and later derivatives), photos of some of which can also be seen elsewhere in this section.



Updated factory-painted samples of some of the many variations of Auscision's r-t-r HO scale 'Series 1' VR X class diesel locomotives. The production run is due to arrive in Australia during December 2015.

The production run of these vehicles is also due in December 2015, along with a re-run of the coil steel loads.

The first factory samples of the NSW 48 class are expected towards the end of 2015. The seri-

ous downturn in the value of the Australian dollar has forced Auscision to end the \$220, 'early bird' pre-order price for the 48 class on 1 January 2016.

The first factory painted samples of the Commonwealth

Railways RMX 63' flat wagon and the UGL C43/C44aci locomotives are expected in early January 2016.

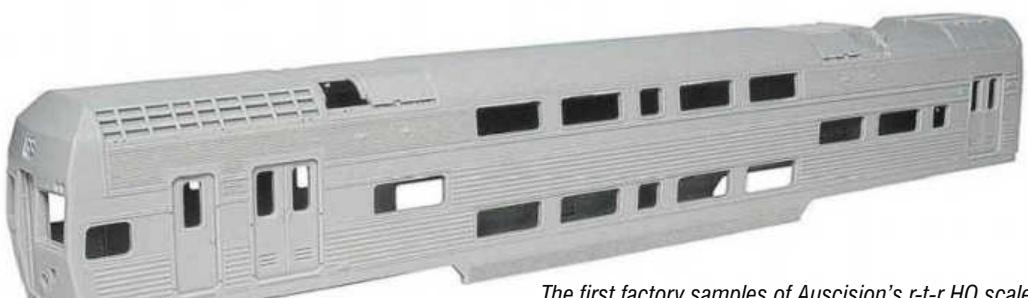
Of the recent Auscision releases, stocks of the EDI GT46C-Ace, plus the NSW 421 locomotives and XPT trains are already getting low.

The ongoing saga of the Auscision shop is set to end with the planned opening in late November 2015 (as AMRM accidentally predicted last year!) Hopefully, last year's prediction will turn out to be accurate!

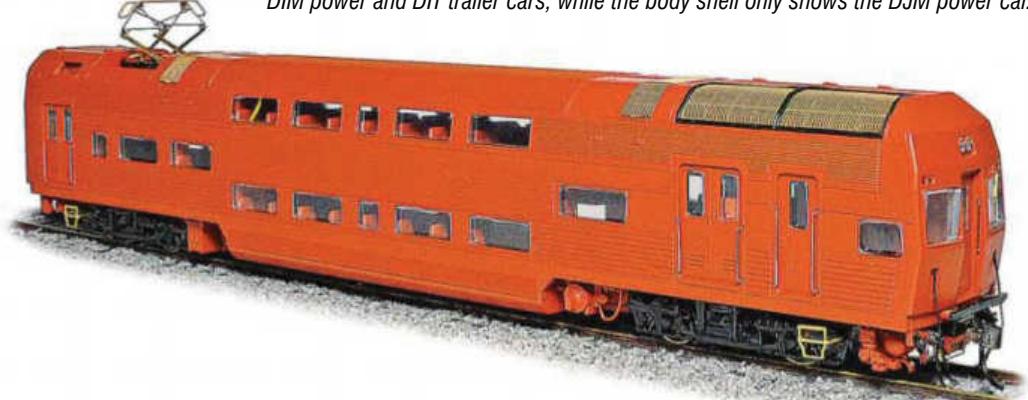
Berg's Hobbies have received supplies of an axle gear repair tool from K&M Engineers. The precision turned and machined brass components can be assembled in various



First factory sample of Auscision's r-t-r HO scale MBY car-carrying wagon. The production run is expected to arrive in 2016.



The first factory samples of Auscision's r-t-r HO scale NSW double-deck interurban/intercity EMU cars. The complete samples show the DIM power and DIT trailer cars, while the body shell only shows the DJM power car.



combinations to safely remove wheels and gears from axles and then replace them with new or repaired components.

Custom Hobby Decals have released decal sheets for the *Southern Aurora* (including the MBY/MBK car carrying wagons). There are two different sets available (four in all, two for the carriages and one each for the MBK and MBY) with different numbers on each. Also released is a set of standard NSWGR shaded carriage lettering decals, which includes all the common lettering to be found on NSW passenger cars, such as *FIRST*, *SECOND*, *SLEEPING*, *BUFFET*, *DINING* etc., including decals for rail motors, the dental clinic and dynamometer cars. The decals are available by mail order from the Custom Hobby Decals website.

Eureka Models received word from their Chinese factory in October that painting of the NSWGR NCR set cars was under way, with delivery of the production run to Australia expected in late November, around the time this issue appears.

The next delivery from China is expected to be the Newcastle coal-fields, private owner, four-wheel, hopper wagons, still on schedule for a first half of 2016 arrival.

All other outstanding projects appear to be proceeding satisfactorily towards delivery in due course. **Ixion** were expecting to receive the first factory-painted samples of their r-t-r 'low-frame' NSWGR 32 class steam locomotive in late October or early November, just after we went to print. The first production run of twelve versions is currently expected to arrive in Australia in late December 2015 or early 2016.

Jemkits, a specialist producer of urethane tram kits that had not previously come to our attention, showed four kits at the AMRA (NSW) Liverpool exhibition in October. Now available are kits for Adelaide H and drop-centre F1 trams, Victorian SEC maximum traction cars, as also modified and operated in Geelong, Bendigo and Ballarat, plus Hobart bogie saloon car. These kits are available as static models or can be motorised with various methods (depending on car type) such as a Hollywood Foundry Bullant, Tenshodo SPUD or David Voice maximum traction truck kit. Also available is a urethane tram depot façade and adaptor parts to allow owners of static kits to retrofit a Hollywood Foundry Bullant.

Kerroby Models have released more items into their extensive range of whitemetal castings, including sprung buffers for NSW

45 class locomotives, a generic diesel cab interior, a pack of six 'stink pipes' for buildings, a ten-pack of Wunderlich basins for detailing sleeping car interiors, a pack of five painted cockatoos, three perched and two flying, an eight-pack of painted Charolais cattle and a pack of forklifts.

Also now available are double-peaked and 'smoothed down in transit' concentrate loads for Eureka GP wagons, available singly or in two-packs.

Lyndon's Trains have released their urethane kits for the Victorian 'Sprinter' railcar and the FJ four-wheel flour wagon.

Models 'N More are working on a laser-cut kit, with a working clock in the clock tower, of the post office building at Kiama, due for release in mid-2016.

On Track Models have announced their intention to produce a range of r-t-r NSW 80 class diesel locomotives. There will be five body variations and fourteen colour schemes, including 'faded' versions of original and reverse Indian red, covering the history of class from their introduction into service in 1978 until today. The models will be DCC-sound ready, at the very least, and OTM is looking into providing OEM sound, with a 'sugar cube' speaker, as an option. The first factory-painted samples are expected in time to display at the June 2016 long weekend exhibition at Thornleigh, NSW. The production run is scheduled to arrive in Australia in October 2016. Order forms will be available from March 2016.

The release of the r-t-r Victorian 'Sprinter' railcars has been pushed back to early in 2016, due to a last-minute change to a close-coupling system to improve the appearance



Factory-painted samples of some of Auscision's planned range of HO scale r-t-r NSW JLX and derivative large louvred vans. The production run is expected to arrive in Australia during December 2015.

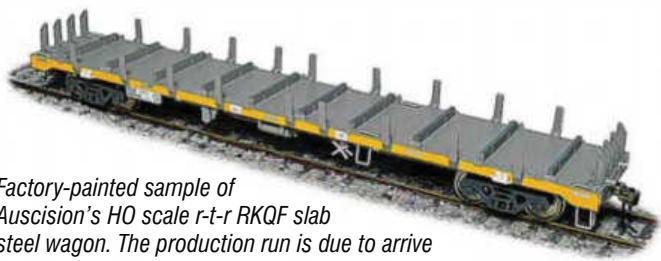


Factory sample of Auscision's HO scale r-t-r 'Southern Aurora' sleeping car.

of the vehicles when coupled together.

Orient Express report that their first six 'billboard' M vans, Cockings Express Delivery, TNT, Elder, Smith and Co., Metters Windmills, Brighton Cement and Sickle Brand Liquaphene/Rotalene arrived on schedule and have proven very popular with the buying public; to the extent that the TNT version sold out shortly after arrival. The next two, Farmers' Union 'Benefits' and Caltex Motor Oil, are expected to arrive, as planned, in December 2015, with West End beer and Kangaroo cement to follow in January 2016.

Factory-painted samples of the wide-bodied 'Glenelg' end-platform cars are expected to arrive in early 2016, with release of the production run planned for the Adelaide exhibition at Greyhound Park, Angle Park, in June 2016. Order sheets for the cars should be available by the time you read this.



Factory-painted sample of Auscision's HO scale r-t-r RKQF slab steel wagon. The production run is due to arrive in early 2016.



The latest factory sample of Auscision's HO scale r-t-r NSW Sydney suburban 'Tangara' EMU project.

Factory painted samples of the next run of BRM's HO scale r-t-r Victorian T class, this time concentrating on the appearance of the class in the latter part of their lives with cut-away valences and the colourful colour schemes applied to some of the class in the 1980s and 1990s.





Berg's Hobbies showed the first samples of their r-t-r HO scale Sydney suburban EMU double-deck stock at the Liverpool exhibition. To be marketed under their Minimodels label, the first release of power cars (C), trailers (T) and driving trailers (D) is expected in early 2016. The first release will feature two era-specific colour schemes, 1980s era plain stainless steel finish and the modern-era 'Citydecker' stock with destination board and yellow doors. More colour schemes will be released at a later date. The vehicles illustrated here are preliminary samples and do not necessarily represent the appearance of the production models.

Powerline have been promised delivery of the all-new versions of their r-t-r Victorian S air-conditioned cars in time for release around Christmas 2015. The new cars will feature interior detail and will be factory-fitted with Kadee-style couplers.

Railmotor Models were expecting more factory painted samples of their SCT locomotive as we went to press. It has been indicated that the production run may arrive by Christmas 2015.

Scale Workshops have released a 120' laser-cut MDF Warren truss bridge, available in both double and

single track versions. Also available laser-cut, but in 1mm ply, are packs of Hill's hoists, various packs of fences and gates, pushbikes in both girls' and boys' versions, some with baskets, and a cattle loading ramp. The laser-cut kit for a 40' road cattle trailer has also been released.

SDS Models received the first deliveries of their NSW JCW/NQJW 80' container flats in late October. Five packs were received in the first shipment; JCW as delivered in 1974/75 in Indian red, Packs A and B; JCW in 'road grime' grey, Packs A and B; plus post-1980 NQJW,

also in 'road grime', Pack A with the NSW Transport logo. The balance of the release was expected to arrive in late November/early December 2015.

The NSW MRC/MBC/MB refrigerated/closed vans are currently being assembled and are expected to arrive late December 2015/early January 2016.

The first factory-painted samples of the NSWGR SHG/BHG goods brake vans were expected sometime in early November and should be available for display by the time you read this.

The next release expected after the MRC vans is the Speed-E-Gas tanker, expected sometime in the first quarter of 2016 (depending on whether it clears the factory before or after Chinese New Year).

Shrike Models are now expecting the first delivery of their r-t-r NSWGR 30T locomotives, fitted with ex-P class six-wheel tenders, in late December 2015, or early 2016. The bogie-tendered versions are expected at an unspecified later date.

Signals NSW, the custom signal building service offered by Dale Richards, has informed us that he will also assemble customers' kits, such as Ray Pilgrim's 3D-printed and Keiran Ryan's etched signal kits, as well as providing custom-built signals from his own range of parts.

Southern Rail still expect to release the second run of their Victorian V/Locity railcars at the Sandown model railway exhibition in March 2016.

Also reported is that stocks are

running low on all their current range of passenger-carrying vehicles (NSW U set single-deck interurban EMU and Xplorer/Endeavour DMU sets).

Stocks are running low of the Victorian FX flour hoppers, with packs 1, 2, 3 and 4 sold out and the rest nearly gone.

Times Gone By have developed a 3D-printed kit for the PN RHKY aggregate hopper, as described in 1295/2196 Aggregate Trains in AMRM Issue 314 (October 2015). The kits are only available direct from Times Gone By.

Uneek have released a number of new packs of cast brass detail items, including gas lights on standards, miscellaneous packs of brooms and shovels and a six-pack of fireman's shovels.

An addition to the Anton's Trains line of accessory items are cast loads of scrap for NSWGR S open wagons.

Due to the slowing demand for straight DC controllers, the range carried is being reduced as stocks of the slower selling items run out.

O Scale

Auscision now expect delivery of their NSWGR 45 class locomotives to occur towards the end of 2015.

Keiran Ryan Models stated at the AMRA (NSW) Liverpool exhibition that they expected to have a working example of the chassis for their NSWGR 20 class 2-6-4 tank locomotive on display at the O scale Forum at North Sydney at the end of October, with release of the full kit planned for the end of November 2015.

Model O Kits have released their DJH-sourced 7mm scale etched brass and whitemetal kit for the NSWGR 36 class 4-6-0 steam locomotive. Also released was their new version of their Waratah-labelled r-t-r brass NSWGR CPH railmotor. Available only in Indian red with either tongue and groove ('matchboard') or plain plywood siding, tongue and grooved No.18 has already sold out (1 and 31 are still available), while stocks of the smooth-sided 13 and 33 are already getting low.

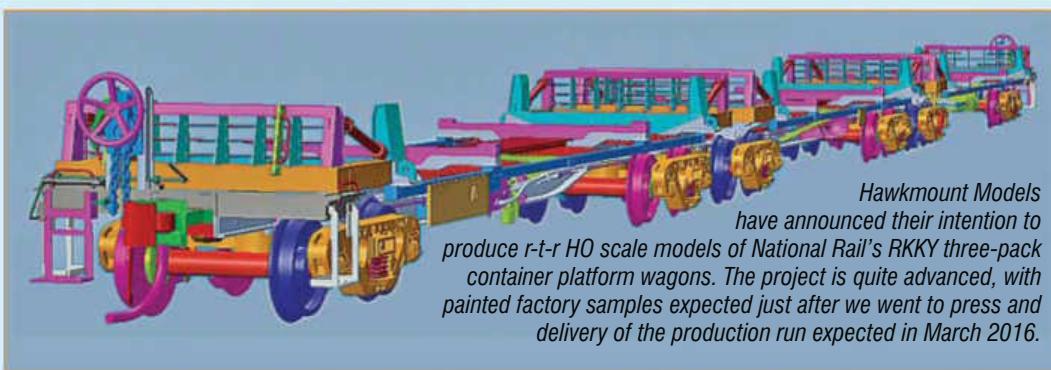
Also released are laser-cut, heavy card speaker boxes in sizes suitable for the smaller locomotives.

Of the future planned releases, the first sample of the HG four-wheel goods brake van is expected to arrive in November 2015, with samples of the TRC refrigerated van and BBW ballast hopper due in early 2016.

Pioneer Models have announced a crowdfunding project through the OzCrowd Australian crowdfunding



Casula Hobbies have received the first factory samples of their planned r-t-r HO scale NSW BNX car carrying wagons. Release of the production run is planned for March 2016.



Hawkmount Models have announced their intention to produce r-t-r HO scale models of National Rail's RKYY three-pack container platform wagons. The project is quite advanced, with painted factory samples expected just after we went to press and delivery of the production run expected in March 2016.

site (<https://ozcrowd.com/campaigns/brass-o-scale-143-nsw-32-class-locomotive/#.Vfqggs5u4gU>) for a 'low frame' 32 class steam locomotive. If the attempt is successful, the r-t-r locomotive will be available in lined green, lined maroon, black, or black with red footplate edging. The project needs 80 signups to be viable, which must be achieved by the December 13 cut-off date or the project will have to be dropped. With crowdfunding, money pledged is not collected unless the project proceeds.

Transit Classics can provide, approximately one month after ordering, a complete kit for a Brisbane FM (506-554 series) tram. These kits are the parts used by SPTC to assemble their models, but come in unassembled and unpainted form, at a considerable saving over an SPTC-assembled model.

Due to lack of interest, the project to produce a Brisbane 400 class tram through SPTC has been cancelled.

Veteran Models expect to release a 1:48 scale kit for a VR four-wheel U van with wheel handbrake in the near future. Longer term, work has commenced on developing a kit for a K class 2-8-0 steam locomotive, with release anticipated to occur late in 2016 or early 2017.

N Scale

Badgerbits report that their NSWGR 36 class 4-6-0 steam locomotive kit project is proceeding satisfactorily, with rapid prototyped 3D printed masters received and being worked on. As only 50 units of this mid-2016 limited edition release will be made, pre-ordering is recommended. A similar limited edition kit for the NSWGR 35 class 4-6-0 steam locomotive, as well as a complete kit for a NSW 85 class Co-Co electric locomotive (urethane body on custom chassis), are also slated for release in mid-2016.

Urethane kits for the NSW 49 and 422 class Co-Co diesel locomotives are now available. The 422 requires an Atlas SD7 chassis to power it. Also now available are kits for 'Blitz' road trucks.

A NSW 73 class B-B diesel hydraulic shunting locomotive kit is in development, with release planned for the AMRA (NSW) Liverpool exhibition in 2016.

FrateN has released r-t-r models of NSW NPY cement hoppers in FreightCorp's blue and white colour scheme.

Gopher Models now have decals available for their r-t-r NSW 48 class locomotives, allowing the

RailCorp Infrastructure (both orange and turquoise schemes), Grainscorp, PN, Austrak and some others, to be reproduced.

The first factory samples of their r-t-r NSW 44 class Co-Co diesel locomotive are expected to arrive in March 2016.

S Scale

Strath Hobbies have released details of their new product range of SAR narrow gauge Sn3½ scale kits (Sn3½ is S [1:64] scale models of 3'6" gauge prototypes running on 16.5mm [normal HO/00] gauge track). The first of these kits was released at the *Modelling the Railways of South Australia* convention in September 2015 and is now available from End of the Line Hobbies in Victor Harbor, SA. The current range consists of a Commonwealth Railways NSU Co-Co diesel locomotive and SAR rolling stock; MCn and VCW vans, Cn cattle wagon, HB horse box, a passenger brake van kit and three versions of the goods brake van.

Expected to be released around the time this issue of AMRM becomes available are the SAR 830 class Co-Co diesel, the standard 75 class Brill maximum capacity railcar, as well as the slightly different Brill No.100, and the SFNC flat wagon.

The kits come complete with bogies, decals and detail items (everything except paint, glue and couplers).

More kits are in development, including the CR NB 0-6-0 diesel shunter, SAR DA/T/900 class Co-Co diesel, CR NJ Co-Co diesel, a Brill 75 trailer, plus more wagons and carriages.

As well as the complete kits, there is a range of parts available, including Fox, bar frame and arch-bar bogies (with both round and square axleboxes). These are available with either spoke or disc wheels. Forty ton modern bogies are also under development. There is also a growing range of decals, which include decals for the 830 class locos in SAR 'mustard pot', ANR green and gold, and Silverton red/white colours.

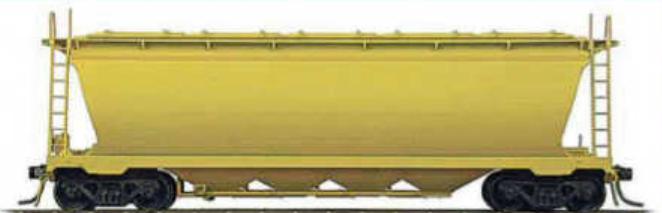
Large Scale

Argyle Loco Works have released the four versions of Accucraft's live steam 1:32 scale LNER A3 Flying Scotsman, including a single chimney version in LNER green, as originally preserved, which was also the condition in which it ran in Australia during 1988/89.

The 1:32 scale NSWGR 38 class project, to be available in both live steam and electrically powered versions, is progressing as



IDR Models unexpectedly announced a project to produce a range of r-t-r HO scale NSW X200 class rail tractors at the 2015 AMRA (NSW) Liverpool exhibition, with a display of working factory samples on the stand of their parent organisation, Micro Models Hobbyland. The DCC-ready model is expected to be released in early 2016.



A 'test print' 3D printed sample of WAGR/Westrail WW standard gauge wheat wagon kit in development by Marbelup Models for HO scale. The prototypes, affectionately known as 'Willie Weeties', entered service in 1966 and formed the mainstay of the WA standard gauge grain fleet for over 45 years until Cooperative Bulk Handling introduced their own locomotives and rollingstock in 2012. The body of the WW is 3D-printed in one piece, while the roofwalk and ladders will be etched in brass as a one-piece 'fold-up' to simplify assembly.



Some of the first factory-painted samples of the HO scale r-t-r range of NSW MRC and derivatives refrigerated/closed vans expected from SDS Models in 2016.



Trainorama have received factory painted samples of the next batch of their r-t-r HO scale NSW 48 class locomotives. This batch will concentrate on the 1980s era form of the 48 class, with 4836 in the special green colour scheme applied for the 125 years of the NSW railways celebrations in 1980, plus locos in 'reverse' Indian red, SRA 'candy' and the simplified 'red terror' colour schemes. The production run is expected to arrive by the time this issue of AMRM is released.

planned, with the first pilot models expected to arrive in Australia in March/April 2016.

The pilot model of the live steam 1:32 scale Sydney steam tram motor is expected to arrive in time

for display at the Great Southern Steam Up at Emerald, Victoria, in November 2016.

GME now have available 1:32 scale sprung buffers of both the NSWGR 'Turton' style, as used on hook-

drawgeared vehicles, and the Cammell 'standard freight' buffer, as used on vehicles with knuckle couplers. Also available are the two types of buffers used on close-coupled passenger car sets, the short buffers fitted to the intermediate cars and the standard-length buffers fitted to the terminal ends.

Soon to be released (if not already available) in 1:32 scale are kits for the wartime emergency BOB set cars in laser-cut MDF and acrylic. These will be a complete kit with detail parts and decals.

Also for imminent release is a 1:19 scale version of the 2' (610mm) gauge, Queensland cane tramway locomotive *Coolum*. The kit is available to order for both 45mm and 32mm gauges.

Middlewood Bank Railway displayed a pilot model of a live steam powered, 1:32 scale NSWGR 38 class 4-6-2 locomotive at the AMRA (NSW) Liverpool exhibition in October. The gas-fired locomotive is expected to be released in early 2016. Orders with deposits are now being taken. The first locomotives to be delivered will be of the non-streamlined version, available in either green or black colour schemes. The intention is to also produce a streamlined version at a later date.

All Scales

Gwydir Valley Models have received supplies of the new Econami sound decoder from Soundtraxx. The three types, of various amperage, size and features, are available pre-loaded with either steam, diesel or electric locomotive sounds that are all adjustable by the user. The 1A ECO-100, the smallest unit, and the 4A ECO-400, the largest, are designed to be hard-wired, but the 1A ECO-21P is fitted with a standard NMRA-compliant 21-pin connector for 'plug and play' operation.

Wuiske Models have released a new product for scenery building, a pack of plaster impregnated cloth. Marketed as WPB150: Plaster

Cloth, each pack contains a 15cm x 5m section of loose knit cloth, embedded with plaster. Use of the product is quite simple, just dip in water, put in place over a suitable former, such as carved foam, chicken wire, card strips etc., smooth out and let dry. It can then be painted and scenicked as per normal. It can even be cut into strips to form roads and other scenic features.

Sound CD

Loco Records have released *Vintage Diesel*, a 33 track audio CD featuring sound tracks recorded between 2007 and 2014, showcasing older diesel locomotives and railcars, mostly Victorian, with the occasional South Australian and NSW locomotive, recorded in country Victoria and NSW. Locomotive classes featured include Victorian A, B, C, G, N, P, S, T and X classes, ex-AN CLP and NSW 42, 48, 81 and 82 classes, both singly and in multiple, as well as two tracks featuring preserved DERM, RM58. The tracks are very clearly recorded and reproduced and will be very useful to those seeking inspiration for correctly 'tuning' sound-fitted models, or just wishing to enjoy the sounds of the real things moving through a soundscape of natural sounds. The CD is available from the ARHS bookshop in Sydney, Alco World



Signs of all Kinds are to release decals for the illustrated colour schemes for HO and N scale 40' containers. The decals will be available direct from Signs of all Kinds and from hobby shops that carry the range.



A sample of the Badgerbits conversion kit to enable NSWGR VUB sets 75 and 76 to be modelled in N scale. The kit of parts, enclosed vestibules for the intermediate ends and cast brass end-platform railings for the terminal ends of the set, is expected to become available in December 2015. The kits will be available either as a set of bits to convert existing Gopher Models end-platform cars or as complete kits with the conversion parts and Gopher Models end-platform cars included.



A partially completed sample of Model O Kits' 7mm scale kit for a NSWGR G2 goods shed in laser-cut card and timber. The kit is expected to become available in December 2015.



Samples of the Gauge 1, 1:32 scale, 2AA and Bettendorf bogies soon to be available from GME. The cast metal bogies come complete with wheelsets and ballrace bearings.



(Ingleburn NSW), Train World (Brighton Vic) and the Train Pictures online shop.

Publications

Train Hobby Publications expect to release their next title, *Country Branch Lines Vic Part 10*, which covers the Yaapeet, Yanac, Patchewollock and Bolangum branches in the Western Region of Victoria, towards the end of 2015.

Work is also under way on the next volume in the Ted Payne *Vantage Point* series, this time chronicling his forays into NSW, generally in the period 1962-1971. Publication is expected around the middle of 2016.

Of the 148 titles published so far by Train Hobby Publications, nearly half of that number is now out of print. Unfortunately, the numbers don't add up to do full reprints, but there is a small ongoing demand for the out of print titles, so copies of some of these out of print titles are being made available on CD; see the Train Hobby Publications advertisement elsewhere in this issue for a full list of what is currently available.

Compiled by James McInerney

DIARY

BRAYBROOK – VIC. November 21-22, 2015. Braybrook Secondary College, Burke Street, Braybrook. 9.30am-5.00pm (Sat), 9.30am-4.00pm (Sun). Contact: Joe 0407 560 360 Ah (03) 9360 4125 or Martin 0432 407 502 Ah (03) 8682 8693. info@sunshinemrc.org.au. Sunshine Model Railway Club.

MELBOURNE – VIC. November 24-26, 2015. AusRAIL PLUS 2015 at the Melbourne Convention and Exhibition Centre, 1 Convention Centre Place, South Wharf VIC 3006. Website: www.ausrail.com

KYNETON – VIC. November 28-29, 2015. Australian Railway Modellers Manufacturing Expo in conjunction with the Cottage Industry Consortium present ARMMEX 15, Masonic Hall, Kyneton. Brian 0427 047 411.

WARRNAMBOOL – VIC. January 9-10, 2016. St Joseph's Primary School Hall. 10.00am-5.00pm (Sat), 10.00am-4.00pm (Sun). Exhibition manager David Shalders 0422 164 747 or WMRC Inc. PO Bpx 1221, Warrnambool 3280.

CORIO – VIC. January 23-24, 2016. Geelong West Town Hall, Pakington St, Geelong West (cnr Albert). 10am-5pm (Sat), 10am-4pm (Sun). David Nicholas 0409 528252 or steam3203@yahoo.com.au

THIRLMERE – NSW. March 6, 2016. Thirlmere Public School Hall. SHMR Inc Model Railway Exhibition in conjunction with Thirlmere Steam Festival. 9am-5pm (Sun) \$2/\$1.50.

KYNETON – VIC. March 12-14, 2016. Macedon Ranges Model Railway Club Inc Exhibition at Sacred Heart College Auditorium. Entry via New & Begg St, Kyneton. 10.00am-5.00pm (Sat & Sun) and 10.00am-4.00pm (Mon). 0427 047 411.

BENDIGO – VIC. March 26-28, 2016. Bendigo Model Railroaders Inc. Exhibition, St Andrews Uniting Church Hall, Myers St Bendigo. 10.00am-5.00pm (Sat & Sun), 10.00am-4.00pm (Mon). Adults \$9, Children \$4, Families \$22. Mark Gair 0418 340 399 bendigomodelrailroaders@gmail.com

KALEEN – ACT. April 2-3, 2016. Canberra Model Railway Expo, U of C High School, 104 Baldwin Drive, Kaleen, ACT. 9.00am-5.00pm (Sat), 9.00am-4.00pm (Sun). Adults \$10, Children, Concession holders \$5, family \$25. Andrew Lund (02) 6231 9799. cmrcexpo@cmrci.info. www.canberra-model-railway-club.webs.com

BOWEN HILLS – QLD. – May 7-8, 2016. Brisbane Model Train Show, Brisbane Showgrounds Marquee Pavilion, entrance from O'Connell Terrace. 9.00am-5.00pm (Sat), 9.00am-4.00pm (Sun). Adults \$15, Concession \$10, Children to 15 Free. [brisbanemodeltrainshow.com.au](http://www.brisbanemodeltrainshow.com.au) brisbanemodeltrainshow2015@gmail.com or AMRA Qld Branch, PO Box 352, Zillmere Qld 4034.

ALBION – VIC. May 14-15, 2016. All American Model Railroad Show at the Maltese Cultural Association Building, 27 Talmage St Albion (Melway 26 F10). 9.30am-5:00pm (Sat), 9.30-4.00pm (Sun). Martin: 0432 407 502 or AH: 9352 4018 or bigboy4007@optusnet.com.au www.facebook.com/usmrc

ALBURY – NSW. May 21-22, 2016. Murray Railway Modellers Inc. Mirambeena Community Centre, 19 Martha Mews, Lavington. 9am to 5pm (Sat.) and 10am to 4pm (Sun.). John Harvey, 0417 650 086 or mrrmshow@gmail.com. www.murrayrailwaymodellers.com

BALLARAT – VIC. June 11-13, 2016. Ballarat Model Railway Show, the Ballarat Specialist School Farm Campus, 800 Norman Street Invermay Park, Ballarat. Open 10am to 5pm, (Sat & Sun) 9am to 4pm (Mon). John McClure jkmccclure8@bigpond.com. (03) 5335 7765.

GLEN WAVERLEY – VIC. June 11-13, 2016. Waverley Model Railway Club Annual Exhibition, Brandon Park Community Centre, 645 Ferntree Gully Rd, Glen Waverley. 10am-6pm (Sat) 10am-5pm (Sun) 10am-4pm (Mon). exhibitions@waverleymrc.org.au

STAWELL – VIC. July 9-10, 2016. SES Hall, Sloane St, Stawell 9am-5pm (Sat), 9.30am-4pm (Sun). Colin (03) 5358 2161 a.h. Grampian Model Railroaders Inc. www.gmrinc.org.au

OPEN DAYS

BUNDABERG – QLD. March 12, 2016. Bundaberg Model Railway Club Inc. open day in the club rooms at the old show grounds, entrance from Kensington Street. 9am-3pm (Sat). Free entry. 0414 685 653 email cnpashley@icloud.com

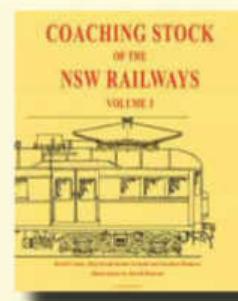
BRING & BUY SALE DAYS

EPPING – NSW. November 28, 2015. Epping Model Railway Club Model Railway Market Day, Epping Creative Centre, 26 Stanley Road, Epping. 10am-1pm (Sat). Free Entry. Ian or Trevor on ah 9876 3522 to book a table.

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clustering just as they do in real life; the wonderful view down the lane on p.20, where the wobbly fence, telegraph poles and varying building heights look just right; and that magnificent large tree behind the K wagon on p.21. I have long been an admirer of the UK's *Model Railway Journal* and its beautiful presentation of great modelling. In the Reids Flat article we have modelling and photography the equal of any I've seen. I await the next instalment with bated breath.

Lindsay O'Reilly
Lambton 2299

I would like to take the opportunity to mention how much I was impressed by the quality and realism on your feature layout *Reids Flat* in the current issue of AMRM [Issue 314, October 2015].

I do not believe that I have seen a feature layout article with photos which are so realistic as those of this layout. The detail John (Reid) has put into this layout is something that all modellers should strive to reproduce.

It just seems like you are there, looking at real-life scenes from that era.

Col Heness
Golden Beach 4551

Image Problem? What Image Problem?

I read with interest Trevor Hodges' *In the Loop* column in AMRM Issue 314 (October 2015) about the image problem the model railway hobby has. I would like to relate a story that recently happened around me.

My sister-in-law and brother-in-law live in a quiet country town on the north coast of New South Wales and, recently, a property across the road from them came onto the market. My sister-in-law saw an older couple having a look at the property and engaged them in conversation about the town and the property. She discovered that the husband was interested in the property's large room under the main house because he had model trains.

My sister-in-law rang her sister in Sydney (my wife) to tell her of the prospective new neighbours and said the man had a "fetish" for model trains. My wife queried her and asked her if she meant that it was his hobby, which of course it was.

It seems the hobby might well have an image problem if this is how 'ordinary' people think.

Casey Johns
(Non-fetish Modeller)
Engadine 2233

Whilst on holiday in Australia recently, I purchased a copy of *Australian Model Railway Magazine* and read, with great amusement, Trevor Hodges's *Image Problem? What Image Problem?*

It's the same here in the United Kingdom. There is this perception of strange blokes who are probably single, middle aged and who live with their mums. We call them gricers. To 'grice' is to go train spotting.

These gricers are overt in their behaviour, whereas other 'enthusiasts' are more closeted. I fall into the latter class.

I have a G scale garden railway of which I am very proud, but when people visit the house and venture into the garden, I feel obliged to explain that it is for the grandchildren and not really of much interest to me. Why is that?

Earlier this year, I purchased my first live steam locomotive. I got it home and fired it up and with great delight, took a photo of it which I posted on Facebook.

Later that day, a 'friend' posted that "I should get out more."

What chance does one stand?
Anyway, I liked the magazine!

Chris Dempsey
Newark
Nottinghamshire UK

Yahara

Peter Schierloh reports that some observers of his Aussie-themed layout would comment "Look at that Finnish train" (p.43, AMRM Issue 314, October 2015). Perhaps they are more railway-aware than he realises. It is very probable that the 'VR' insignia on some of his rollingstock has been interpreted as the almost identical insignia present on Finnish rolling-stock. On the Finnish railway system this stands for Valtion Rautatiet (in English: State Railways). This system was originally known as Suomen Valtion Rautatiet (Finnish State Railways) and is now named VR-Yhtymä Oy (VR-Group Ltd).

Ross Stell
Kogarah 2217

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Australian MODEL RAILWAY Magazine welcomes letters on any pertinent model railway subject for inclusion in Mailbag. Letters should be sent to Mailbag, SCR Publications, PO Box 345, Matraville 2036, emailed to amrmagzn@tpg.com.au or faxed to (02) 9661 4323. All Mailbag contributions must include the writer's name, address and phone number to permit verification. Contributions without this information will not be considered for publication.

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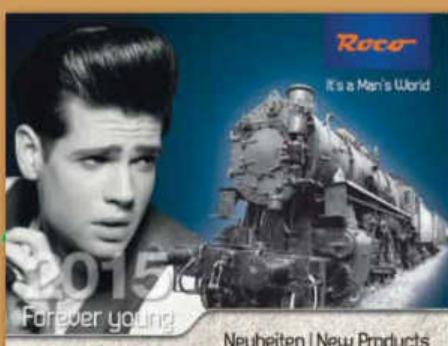
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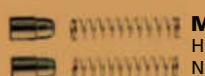
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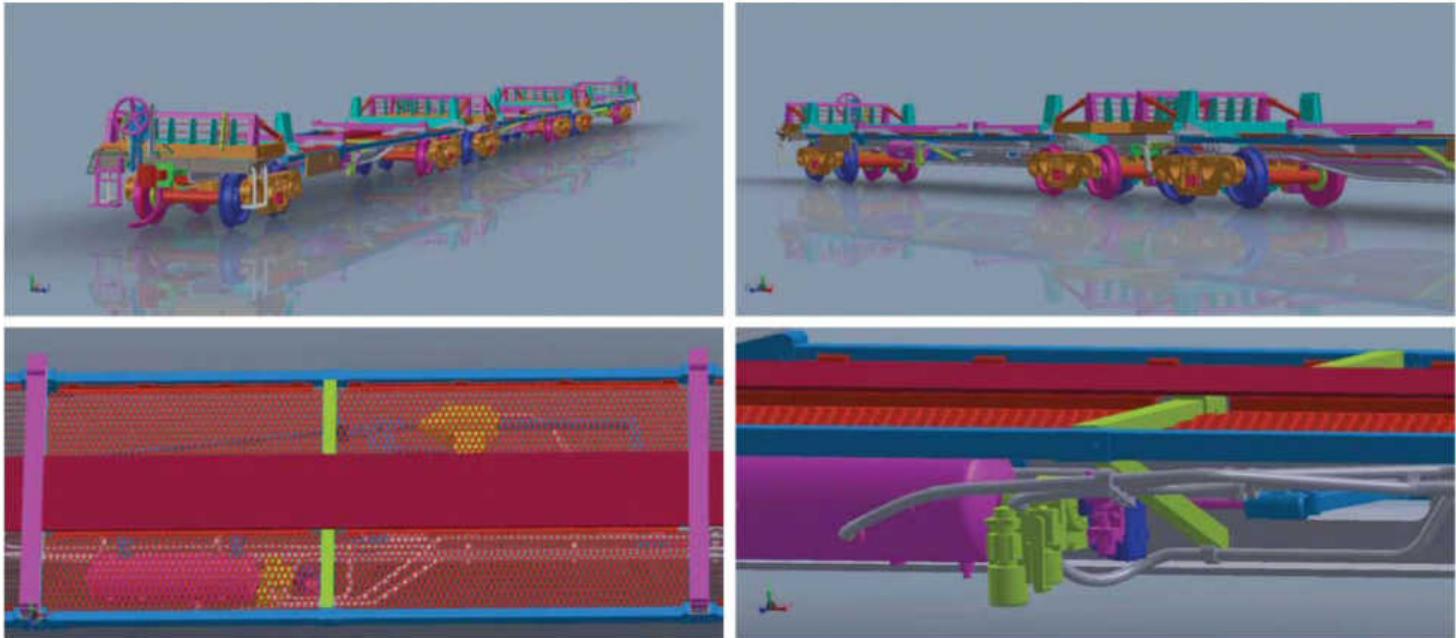
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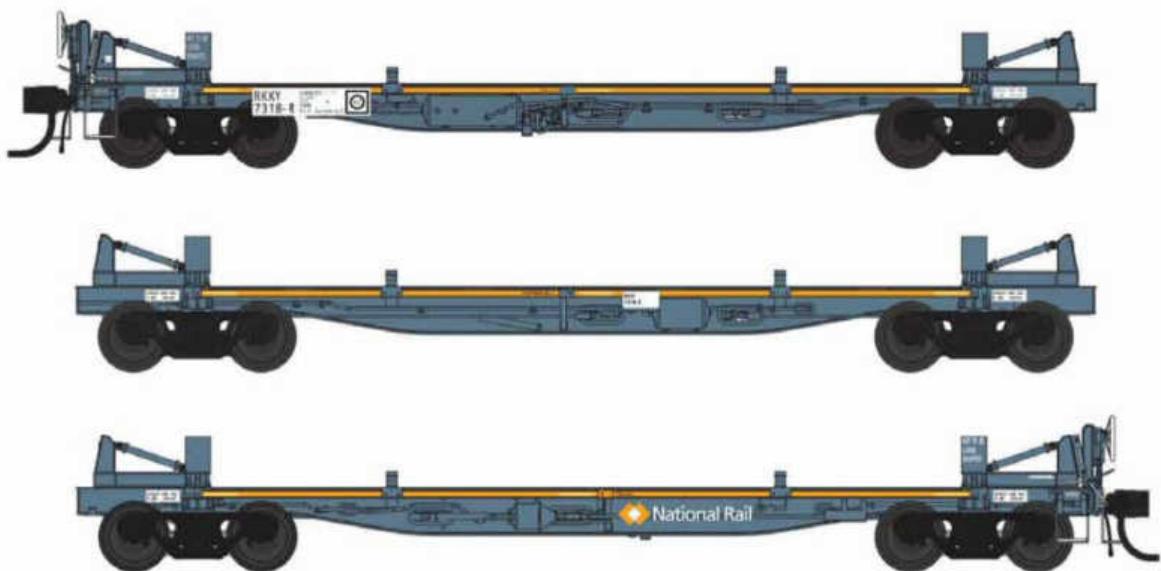
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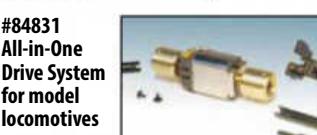
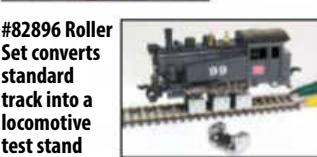
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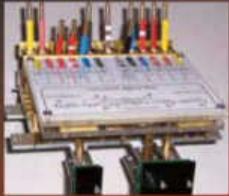
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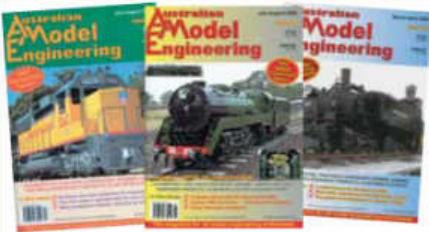
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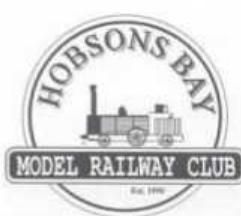
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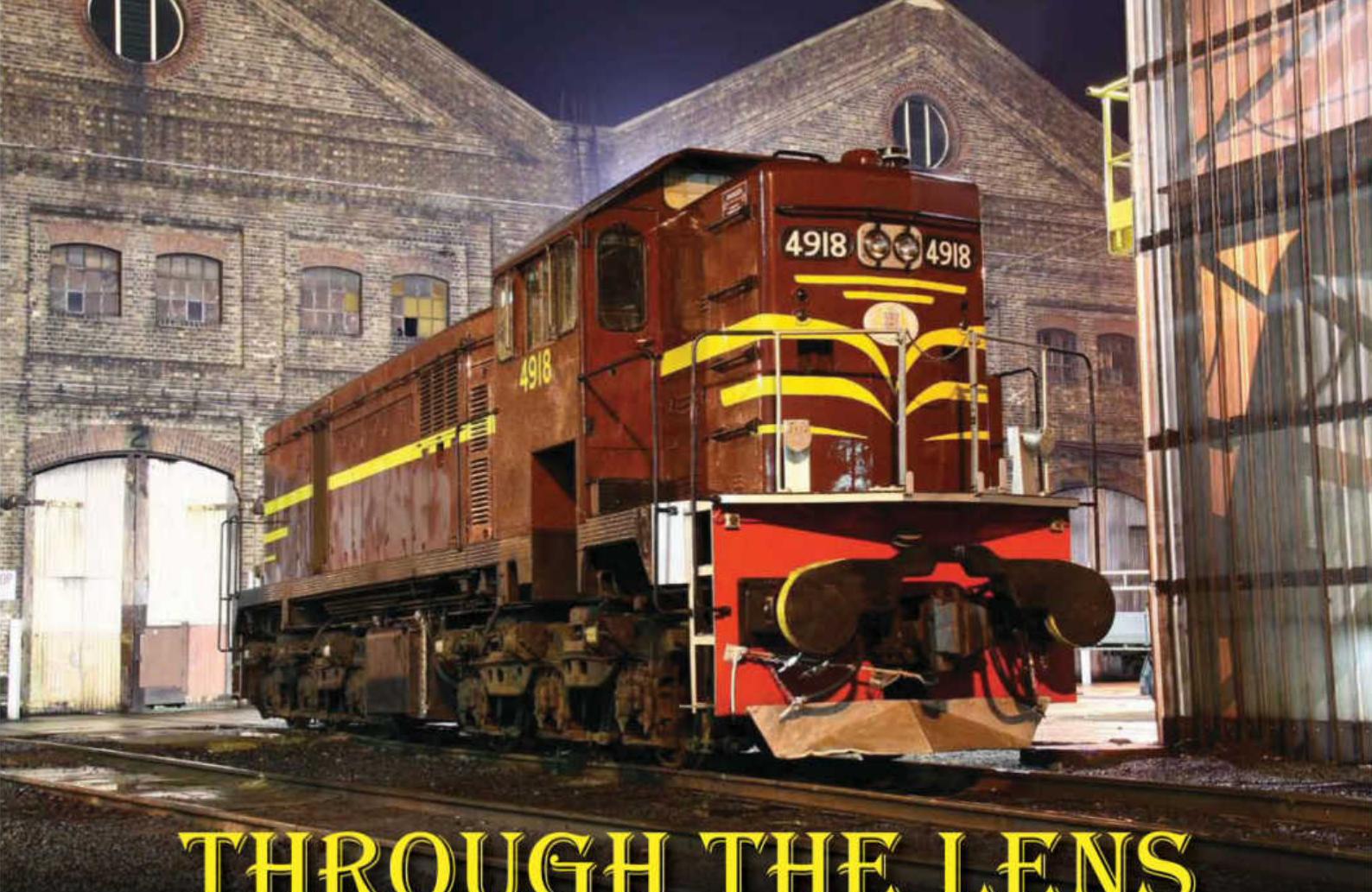
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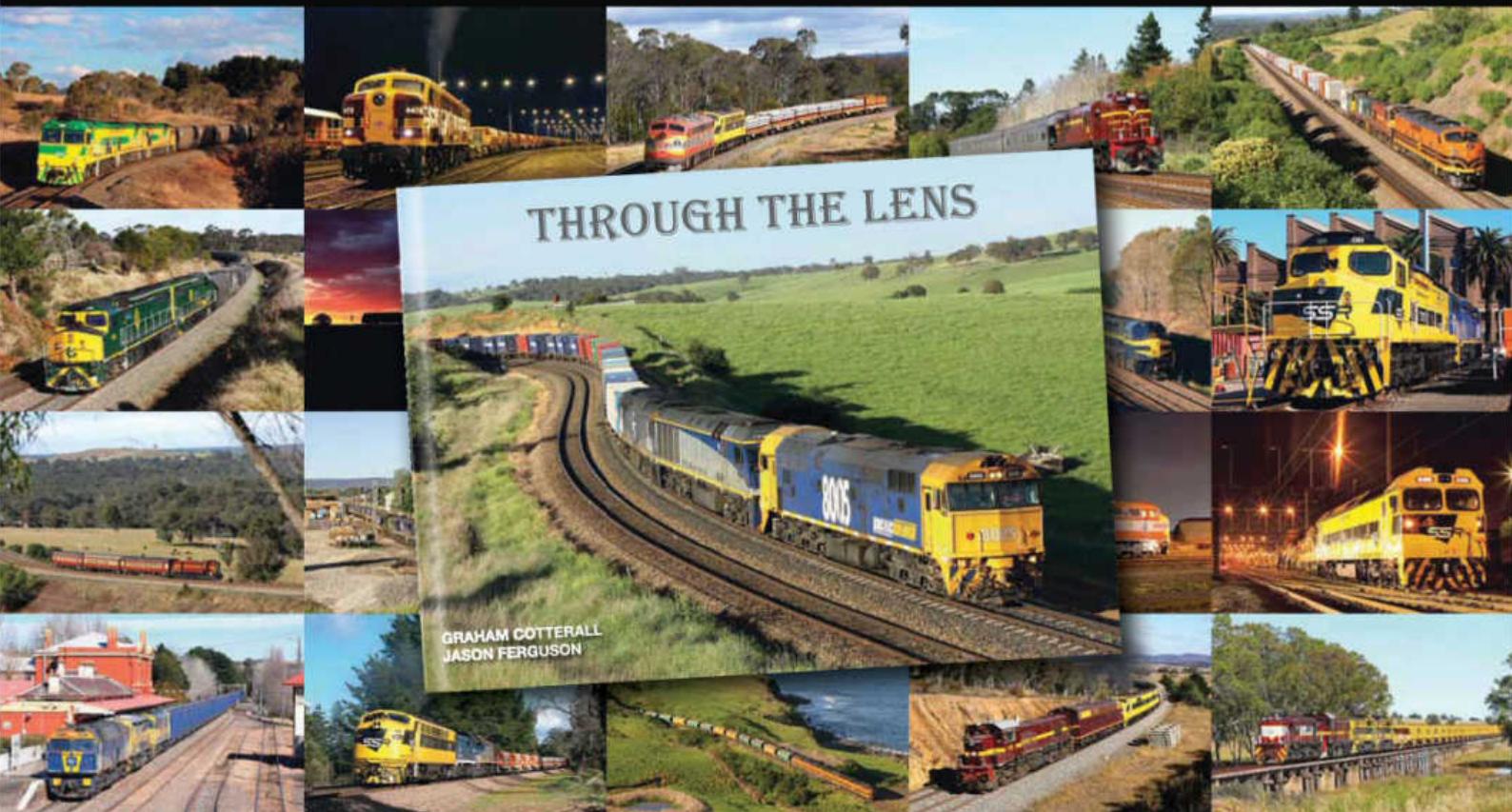
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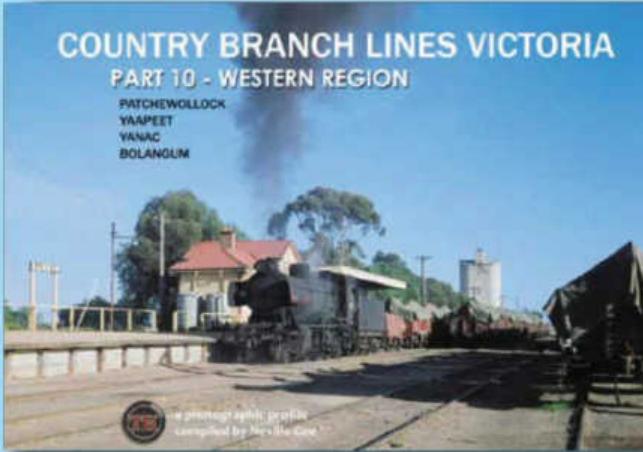
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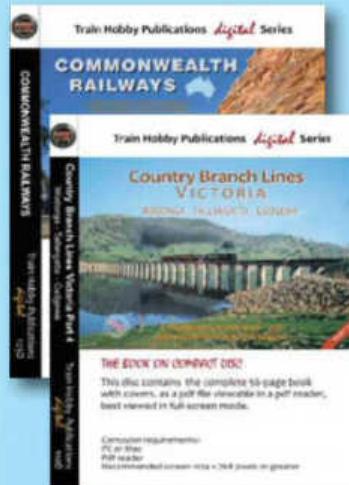
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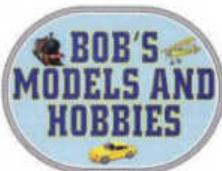
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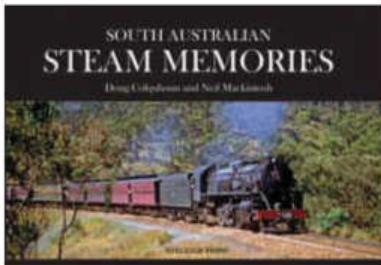
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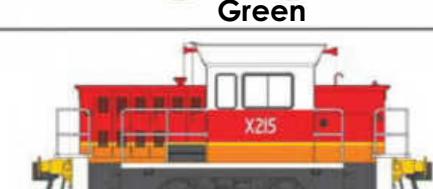
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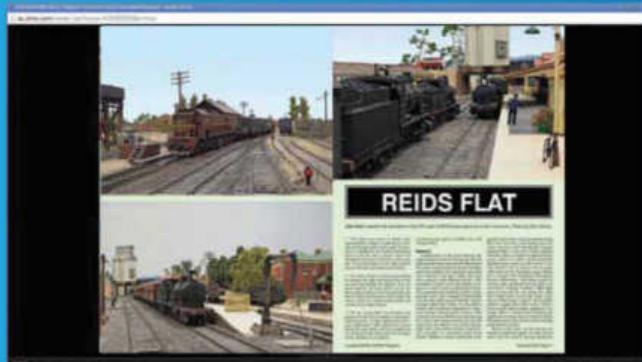
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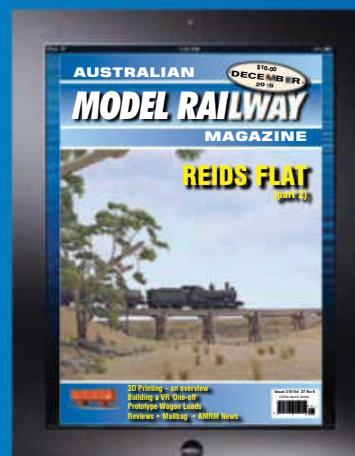
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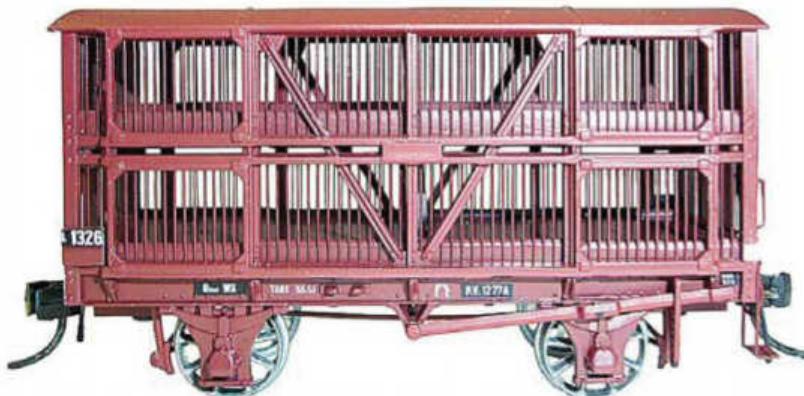
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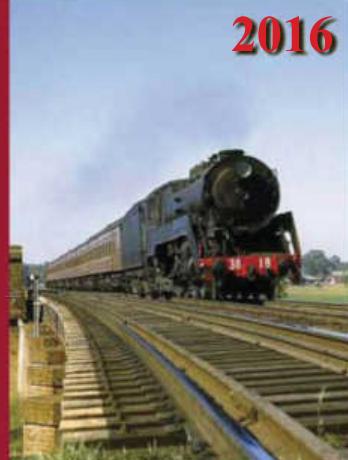
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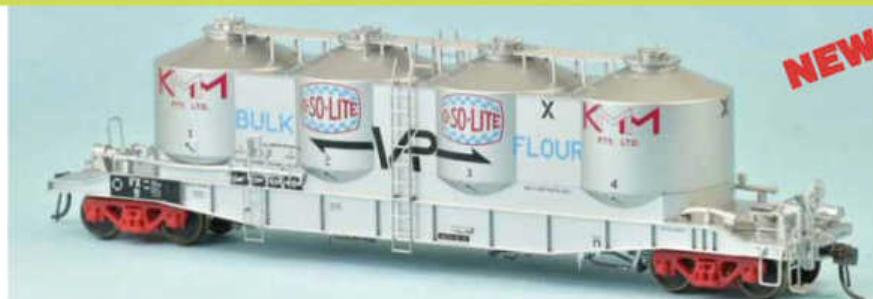
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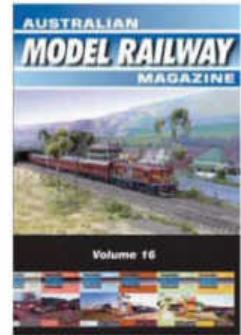
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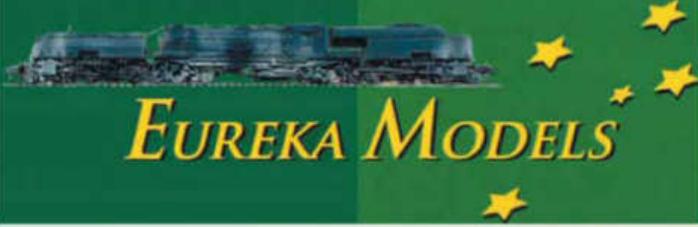
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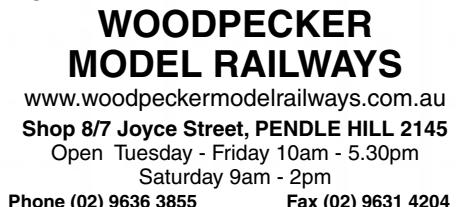
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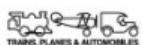


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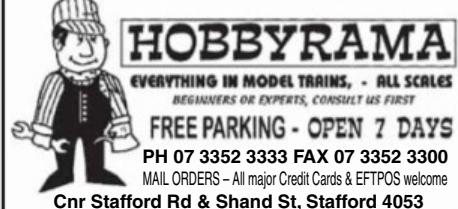
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